SANDAG

First and Last Mile
Solutions for Transit Centers

October 2011

Study Report Prepared for:

SANDAG

Prepared by: PARSONS BRINCKERHOFF

in association with:
Wilbur Smith and Associates
and MJE Marketing Services

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1 Introduction/Purpose

The San Diego region has a well-developed transit system that carries over 334,000 passenger trips a day on fixed-route bus and rail services.[1] The system is composed of almost 40 miles of commuter rail along the coast (COASTER), more than 75 miles of light rail on four lines (three San Diego Trolley routes and the SPRINTER in North County), four Premium Express Bus services along the I-15 Express Lanes, and a network of local bus routes serving key transit centers. There are 73 rail stations, four Premium Express Bus stations, and nine bus-only transit centers in the region that create the backbone of the transit system.

However, access to and from rail and Premium Express Bus stations and transit centers is often a challenge and can be a barrier to transit use for many potential riders. For many trips, transit stations are located just beyond practical walking distance to and from home or work, sidewalks and bike paths connecting with the stations are intermittent, insecure, or non-existent, and/or motorized access options such as feeder buses, shuttles, shared rides, and parking are limited or unavailable. This access deficiency between the transit station and the trip origin-destination is referred to as the first mile/last mile gap and is often cited as the reason more people do not ride transit. Transit can get riders close but not close enough for many trips.

The San Diego Association of Government's (SANDAG) goal is to increase transit accessibility and ridership by improving access to and from stations. To move toward this goal, SANDAG has undertaken this *First Mile and Last Mile Solutions for Transit Centers* study to identify potential pilot projects that would bridge the access gap between home and the transit station (first mile), and between the transit station and work (last mile). To undertake this study, SANDAG applied for and received a Caltrans Planning Grant to:

> "identify major transit hubs along regional rail lines and bus rapid transit routes and formulate recommendations to optimize feeder services to and from these hubs. Possible feeder services could include any number or combination of walking, bicycling, carpools, vanpools, carsharing, vansharing, bus shuttles, paratransit or other alternatives. The goal is to address barriers to taking transit by identifying station-specific solutions that increase the attractiveness of transit to a wider range of users."[2]

Key objectives of the study and pilot project include:

- **Identify the Strongest Station Area Markets** – Identify one or two stations for implementation of a first mile/last mile pilot project. Selected stations could be appropriate for a first mile solution (high propensity for home-to-station trips) or a last mile solution (high propensity for station-to-work trips), or both.
- **Permit Short-Term Implementation** – Define a pilot project(s) that has relatively low capital cost, does not require land use changes, and is easy to implement so that success can be demonstrated in a short time frame.

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1 pcp.sandag.org (SANDAG Passenger Counts, FY2010).

2 FY2009–10 Community-Based Transportation Planning Application – First and Last Mile Solutions for Transit Centers, SANDAG.

- **Require Little/No Operating Subsidy** – Define a pilot project(s) that is sustainable over the long term and requires little or no ongoing public operating subsidy.
- **Focus on Commute Trips** – Focus the pilot project(s) on peak periods and commute trips when most transit ridership occurs.
- **Seek Private Partnerships** – Consider partnerships with employers, homeowners associations, and property managers to implement and support the pilot project(s), if possible.
- **Obtain Stakeholder Input** – Incorporate stakeholder (employee/employer, resident/ community group) input into selection and development of the pilot project(s).

The study and resulting pilot project fall under the responsibility of the SANDAG Transportation Demand Management Division, referred to as iCommute program. The goal of the iCommute program is to reduce traffic congestion during peak-times, as well as reduce greenhouse gas emissions and other environmental pollutants that result from commuters driving to work each day. iCommute assists commuters by providing free carpool and ridematching services, a subsidized vanpool program, transit solutions, regional support for bicycling, and other services and programs.[3] Incorporating first mile/last mile station access solutions into its menu of program options is consistent with iCommute's goals and supports SANDAG's 2050 Regional Transportation Plan mobility policies and transit network.

2 Study Approach

The *First Mile and Last Mile Solutions for Transit Centers* study was undertaken in five steps, each of which is described and discussed in detail in the following sections of this report:

- **Section 3: Station Selection** – A complete analysis of the 86 commuter rail, light rail, Premium Express Bus stations and transit centers was conducted to identify stations for implementation of a first or last mile pilot project. Evaluation and selection criteria, discussed in detail in Section 3, focused on the extent of the potential, untapped transit-ridership market near each station (population and employment), and the relative ease or difficulty in accessing each station (available services, infrastructure and facilities). The analysis identified two stations—the Kearny Mesa Transit Center and the 32nd & Commercial Station—to carry into the next steps. Field surveys in the two selected station areas resulted in an inventory of observed barriers to access to the stations.
- **Section 4: Solution Options** – A comprehensive identification of station access solutions was developed and each potential solution defined to establish a universe of options for consideration. Based on the Barriers to Access Observations and Findings inventory for each selected station, the solution options were screened to create a narrowed list of potential solutions that could address the access barriers of the two selected stations and would meet SANDAG's study goals.
- **Section 5: Stakeholder Input** – Input from transit riders, residents, and employees in the selected station areas was obtained through station intercept surveys and Web-based surveys.

[3] www.icommutesd.com/about

Through the surveys, residents and employees were asked about access barriers between their homes (or work sites) and the transit stations and to identify improvements that would enhance their access and/or encourage them to use transit. In addition to the resident and employee surveys, SANDAG conducted meetings with several interested individuals and employers to delve into more details regarding the barriers and opportunities identified through the surveys. The survey and meeting results were used to develop the most promising first and last mile solutions at each station.

- **Section 6: First and Last Mile Solutions Recommendations** – Using the Barriers to Access Observations and Findings inventory for each station, the narrowed list of potential solutions, and the stakeholder input, a screened list of physical enhancements and capital projects to improve first and/or last mile access to the two selected stations was identified. In addition, motorized solution options were identified for the Kearny Mesa Transit Center to be implemented in partnership with station area employers.
- **Section 7: First Mile and Last Mile Strategy and Implementation Guide** – The study concludes with a *Strategy and Guide for Engaging Employers as Partners in Implementing Last Mile Transit Solutions* for the Kearny Mesa Transit Center. This guide includes strategies for engaging employers as partners to implement motorized solutions, and associated implementation requirements, partnership structures, SANDAG and employer roles and responsibilities, and order-of-magnitude capital and/or operating costs for implementing a pilot project.

3 Station Selection

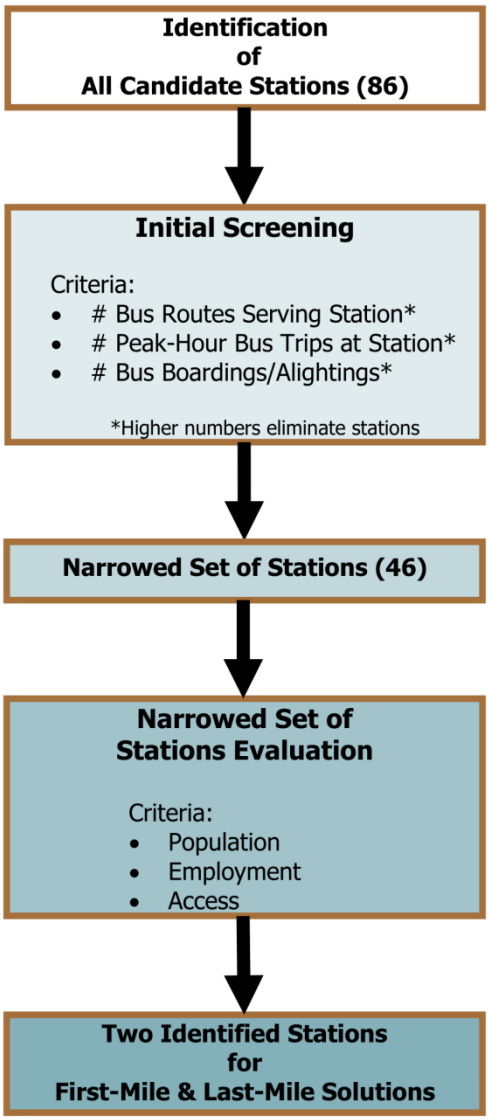
3.1 Candidate Stations and Station Selection Approach

The 73 rail stations, four Premium Express Bus stations, and nine bus-only transit centers provide passenger access to services that create the backbone of the region's transit system. COASTER commuter rail extends approximately 40 miles between the Oceanside Transit Center in north San Diego County and downtown San Diego, stopping at eight stations along the route. The San Diego Trolley light rail system includes 53 miles of track along the Blue, Orange, and Green Lines, serving south, east, and central San Diego, respectively. There are a combined 53 trolley stations on the three routes. SPRINTER light rail includes 15 stations along 22 miles of track between the Oceanside Transit Center on the west and the Escondido Transit Center on the east. And four peak-period Premium Express Bus routes currently travel along the I-15 Express Lanes between downtown San Diego and points north, serving four stations in Sabre Springs, Rancho Bernardo, and two in Escondido. A new all-day I-15 Bus Rapid Transit (BRT) route between downtown San Diego and Escondido via Mid-City will begin service in 2013 and will stop at the Kearny Mesa Transit Center. The BRT will operate in both directions every 15 minutes during the peak periods and every 30 minutes during off-peak periods and evenings. All commuter rail, light rail, Premium Express Bus, and future BRT stations and transit centers in the region were considered candidates for first and last mile solutions since they provide the primary access points to the region's backbone transit system. Figure 1 displays the region's rail and Premium Express Bus stations and transit centers.

Figure 1: Comprehensive Station and Transit Center Locations

To identify two stations for development of first and/or last mile solutions and potential pilot project implementation, a two-step station selection evaluation methodology was used. The first step included an initial screening of the comprehensive list of candidate stations identified previously, using criteria that screened out stations with high levels of existing feeder bus service—a criterion determined to indicate that the station already has good first and last mile access. The second step further evaluated the narrowed set of candidate stations, using population and employment criteria that portray the extent of the potential transit-ridership market near each station, and additional criteria to assess the availability and use of existing services, infrastructure, and facilities that provide and promote access to and from the station. Figure 2 graphically displays the station selection evaluation methodology.

Figure 2: Station Selection Evaluation Methodology



3.2 Initial Station Screening

The initial screening criteria evaluated existing feeder transit access to each of the stations in the comprehensive list of candidate stations shown in Figure 2. Stations with high levels of existing feeder bus service during the peak hour were considered to have well-served first and last mile access. As a result, they were deemed to be poorer candidates for first and last mile solutions. The number and frequency of routes serving each station during the peak hour and each route's peak-hour frequency were used to calculate the number of peak-hour feeder bus trips serving each station. The peak hour was used as a proxy for the entire peak period, which reflects the commute trip focus of the study.

This initial screening approach eliminated the following stations from further consideration:

- **High Feeder-Bus Service Stations** – Stations that have more than 20 feeder bus trips per peak hour were eliminated from further consideration because these stations already have good first/last mile access.
- **All Downtown Stations** – Stations in downtown San Diego and at the edge of downtown have geographically small and overlapping station-access areas and are set in a dense and highly walkable and transit accessible environment. As a result, they are not good candidates for a first and last mile solution pilot project.
- **Unique Stations** – The following five stations were eliminated from further consideration because each has unique characteristics that would interfere with the ability to transfer a successful pilot project application to other stations:

- *San Ysidro Transit Center* (San Diego Trolley Blue Line) – This station serves a large cross-border travel demand and unique trip purpose and market demographic that is not found elsewhere in the region.
- *Qualcomm Stadium Station* (San Diego Trolley) – This station is primarily a special-event station. While this station does provide park-and-ride access for commuters, its location within the 18,000-space stadium parking lot makes applicability of a pilot project solution to other stations in the future more difficult.
- *Sorrento Valley Station* (COASTER) – This station has the most extensive station-to-employment site shuttle system in the region. The publicly and privately provided shuttles are timed to meet the trains in the mornings and evenings and directly serve major employment sites. In a sense, the station is already an example of a successful but highly subsidized (for the public shuttles) first and last mile solution.
- *Pacific Fleet/32nd Street and Harborside/28th Street Stations* (San Diego Trolley Blue Line) – These two stations were eliminated because major employers (National Steel and Shipbuilding and the U.S. Navy) are located within walking distance of these stations, which greatly reduces the need for a first or last mile connection.

Table 1 summarizes the peak-hour feeder-bus frequency at each of the stations and initial screening conclusions. The route and frequency service details for each station are included in Appendix A. Although the more than 20 bus trips per hour that currently serve the Kearny Mesa Transit Center would eliminate it under the screening criteria, SANDAG chose to move this station forward for further evaluation for the following reasons:

- There are a large number of major employers located in the vicinity of the transit center station but off the major arterials where existing bus routes serving the station operate;
- The potential partnership opportunities for last mile solutions presented by the presence of these employers; and
- The planned, new, all day I-15 BRT route that will serve the transit center beginning in 2013.

The narrowed set of 46 stations carried forward for further evaluation are shown by associated rail or Premium Express Bus route in Table 2 and Figure 3.

Table 1: Feeder-Bus Peak-Period Service Frequency to Stations Summary

Feeder Bus Trips/Peak Hour				
41+	**31–40**	**21–30**	**11–20**	**0–10**
Iris Avenue	El Cajon TC	8th Street	San Ysidro	Beyer
Old Town TC	Fashion Valley TC	La Mesa Blvd	Palm Ave	Pacific Fleet/32nd/Street
Euclid TC	El Cajon Blvd Transit Plaza	Oceanside TC	Palomar	Harborside/28th Street
SDSU TC	Kearny Mesa TC*	Vista TC	H Street	Barrio Logan
Escondido TC		Mira Mesa	Bayfront/E Street	Middletown
City Heights Transit Plaza			24th Street	Washington Street
All Downtown Stations			Encanto	Cesar Chavez/25th Street
			Amaya	32nd Street/Commercial
			Santee Town Center	47th Street
			Grantville	Massachusetts
			Encinitas	Lemon Grove
			Carlsbad Poinsettia	Spring Street
			Palomar College	Grossmont
			Sabre Springs	Arnelle
			Rancho Bernardo	Gillespie
				Morena/Linda Vista
				Hazard Center
				Mission Valley Center
				Rio Vista
				Qualcomm
				Fenton
				Mission San Diego
				Alvarado
				70th Street
				Sorrento Valley
				Solana Beach
				Carlsbad Village
				Coast Highway
				Crouch
				El Camino Real
				Rancho del Oro
				College Blvd
				Melrose
				Escondido Ave
				Buena Creek
				Civic Center-San Marcos
				Cal State San Marcos
				Nordahl
				Del Lago

Stations Retained for Further Consideration

* Retained because of opportunities presented by nearby large employers and planned BRT.

Stations Eliminated During Initial Screening

- High Feeder Bus Service to Station
- Unique Stations
- Downtown & Downtown Edge Stations

Table 2: Narrowed Set of Stations for Further Evaluation

San Diego Trolley			SPRINTER	COASTER	I-15 Premium Express Bus
Blue Line	**Green Line**	**Orange Line**			
Beyer Blvd	Santee Town Center		Coast Highway	Carlsbad Village	Sabre Springs
Palm Avenue	Gillespie Field		Crouch Street	Carlsbad Poinsettia	Rancho Bernardo
Palomar Street	Arnele Avenue		El Camino Real	Encinitas	Del Lago
H Street	Amaya Drive		Rancho Del Oro	Solana Beach	Kearny Mesa Transit Center*
Bayfront/E Street	Grossmont Transit Center		College Blvd		
24th Street	70th Street Station	Spring Street Station	Escondido Avenue		
	Morena/Linda Vista	Lemon Grove	Melrose		
	Hazard Center	Massachusetts Ave	Buena Creek		
	Mission Valley Center	Encanto/62nd Street	Palomar College		
	Rio Vista	47th Street	San Marcos Civic Center		
	Fenton	32nd St/Commercial	Cal State San Marcos		
	Mission San Diego		Nordahl		
	Grantville				
	Alvarado				

* Future I-15 BRT Station for service opening in 2013.

Figure 3: Narrowed Set of Stations

3.3 Narrowed Set of Stations Evaluation

The best candidates for first and last mile solutions are those stations that have relatively dense population and/or employment, supportive population and/or employment demographics, and poor existing access. As a result, the evaluation of the narrowed set of stations focused on three key factors:

- Population characteristics near the station
- Employment characteristics near the station
- Access opportunities near the station

Within each of these categories, the following specific criteria were used to conduct the station evaluation:

- Population Characteristics Criteria (applicable to first mile stations)
  - *Population density* (population/acre within 2 miles of station) – Stations with higher population densities make better candidates for first and last mile solutions because they offer a concentrated, potentially latent transit market.
  - *Employed population* (employees/acre within 2 miles of station) – Stations with higher employed populations are better candidates for first and last mile solutions because they offer a concentrated, potentially latent transit market.
  - *Percentage of household auto ownership* (within 2 miles of station) – Stations with a higher percentage of households with low auto ownership are better candidates for first and last mile solutions because they require more need for non-auto alternatives to access the station.

- Employment Characteristics Criteria (applicable to last mile stations)
  - *Employment density* (employees/acres within 2 miles of station) – Stations with higher employment densities make better candidates for first and last mile solutions because they offer concentrated, potentially latent transit market.
  - *Major employers* (within 1 mile of station) – Stations with a higher number of large nearby employers are better candidates for first and last mile solutions because they present concentrations of employees in one location and solution implementation partnering opportunities.
  - *Major employers* (within 3 miles of station) – Stations with a higher number of large employers in an expanded vicinity are better candidates for first and last mile solutions because they present concentrations of employees in one location and solution implementation partnering opportunities.

- Access Opportunities Criteria
  - *Motorized access* (feeder bus and/or park and ride availability) – Stations having little or no feeder bus service or park and ride availability are better candidates for first/last mile solutions because access options are currently limited.
  - *Pedestrian access* (number of intersections within ½ mile of station) – The number of intersections in the vicinity of the station was used as a proxy for an accessible street

network and pedestrian paths. Stations with fewer intersections in the vicinity are better candidates for first and last mile solutions because they have limited street and pedestrian interconnecting networks.

- *Bicycle access* (linear mileage of Class I, II, III, and IV bike routes within 2 miles of station) – Stations with fewer miles of bicycle routes are better candidates for first/last mile solutions because they have limited bicycle access networks.
- *Transit ridership* (AM and PM peak ridership at station) – Stations with lower transit ridership are better candidates for first and last mile solutions because low ridership may indicate existing barriers to station access.

Based on the data range within each criterion, high, medium, and low sub-range values were applied (score values: high = 2, medium = 1, low = 0) for each station. Scores were totaled by category (population, employment, access), and those totals were combined to create a comprehensive score for each station. The higher the score, the better candidate the station was for a first or last mile solution. Table 3 provides the total scores for each criterion and the comprehensive station scores for the narrowed set of stations. Appendix A provides the evaluation and scoring details.

3.4 Station Selection Results

Based on the evaluation, the five highest-ranked stations are:

- Hazard Center Station
- Mission Valley Center Station
- Rio Vista Station
- Fenton Parkway Station
- Kearny Mesa Transit Center

The top-ranked stations on each rail or Premium Express Bus line are:

- Nordahl Road Station (SPRINTER)
- Carlsbad Village Station (COASTER)
- 24th Street Station (San Diego Trolley Blue Line)
- Hazard Center and Rio Vista Stations – tied (San Diego Trolley Green Line)
- 32nd and Commercial Street Station (San Diego Trolley Orange Line)
- Kearny Mesa Transit Center (future I-15 BRT line)

These top-ranked stations are highlighted in green in Table 3.

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Table 3: Narrowed Set of Stations Evaluation: Summary of Evaluation*

	Narrowed Set of Stations	Population Criteria Score	Employment Criteria Score	Access Criteria Score	Comprehensive Station Score (Higher = Better)	Rank by Comprehensive Score (Higher = Better)	Rank by Line/Route (1 = Highest)
SPRINTER Line	Coast Highway Station	3	1	5	9	15	2
	Crouch Street Station	3	0	5	8	23	4
	El Camino Real Station	2	1	5	8	23	4
	Rancho Del Oro Station	2	0	5	7	36	11
	College Boulevard Station	2	1	4	7	36	11
	Melrose Station	3	0	5	8	23	4
	Escondido Avenue Station	3	0	5	8	23	4
	Buena Creek Station	1	1	6	8	23	4
	Palomar College Station	2	2	4	8	23	4
	San Marcos Civic Center Station	2	1	5	8	23	4
	Cal State San Marcos Station	2	2	5	9	15	2
	Nordahl Road Station	2	2	6	10	11	1
COASTER Line	Carlsbad Village Station	4	0	4	8	23	1
	Carlsbad Poinsettia Station	2	0	5	7	36	2
	Encinitas Station	3	0	4	7	36	2
	Solana Beach Station	2	0	5	7	36	2
San Diego Trolley Blue Line	Beyer Boulevard Station	3	0	4	7	36	4
	Palm Avenue Station	3	0	3	6	45	6
	Palomar Street Station	3	1	3	7	36	4
	H Street Station	4	2	3	9	15	2
	Bayfront/E Street Station	4	2	2	8	23	3
	24th Street Station	4	3	3	10	11	1
San Diego Trolley Green Line	Santee Town Center Station	2	0	5	7	36	14
	Gillespie Field Station**	1	2	6	9	15	11
	Arnele Avenue Station**	3	3	5	11	9	7
	Amaya Drive Station**	4	2	4	10	11	9
	Grossmont Transit Center**	4	1	3	8	23	12
	70th Street Station	3	2	3	8	23	12
	Morena/Linda Vista Station	2	4	4	10	11	9
	Hazard Center Station	4	6	7	17	1	1
	Mission Valley Center Station	4	6	6	16	3	3
	Rio Vista Station	4	6	7	17	1	1
	Fenton Parkway Station	4	4	7	15	4	4
	Mission San Diego Station	3	3	6	12	6	5
	Grantville Station	4	3	5	12	6	5
	Alvarado Station	3	2	6	11	9	7
San Diego Trolley Orange Line	Spring Street Station	3	2	3	8	23	4
	Lemon Grove Depot	3	1	3	7	36	5
	Massachusetts Avenue Station	3	0	6	9	15	2
	Encanto/62nd Street Station	3	0	3	6	45	6
	47th Street Station	3	1	5	9	15	2
	32nd Street/Commercial Station	5	3	4	12	6	1
I-15 Premium Express Bus and Future BRT	Sabre Springs Station	2	0	4	6	45	4
	Rancho Bernardo Station	3	1	5	9	15	2
	Del Lago Station	2	0	6	8	23	3
	Kearny Mesa Transit Center***	3	6	4	13	5	1

* Scoring details are included in Appendix A. Green shading indicates highest ranking stations.
** Shared with San Diego Trolley Orange Line
*** I-15 BRT service planned to serve Kearny Mesa Transit Center in 2013.

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After considering the project goals, criteria, and evaluation, SANDAG selected the Kearny Mesa Transit Center and the 32nd & Commercial Station as the two stations for evaluation and development of first and last mile access solutions. These stations were selected from among the topped ranked stations based on the following:

- Although they rated high, the stations along the San Diego Trolley Green Line (Hazard, Mission Valley, Rio Vista and Fenton Stations) are not good candidates for first and last mile solutions because their location in Mission Valley presents many challenges to the potential success of a pilot project. The challenges include physical barriers created by the freeway, river and Friars Road that result in a circuitous and discontinuous street network (poor connectivity), dispersed and mostly retail (non peak hour) employment, lack of large employers as potential partners, and the fact that the San Diego Metropolitan Transit System (MTS) has provided shuttles in the past with minimal success. Mission Valley has good transit infrastructure (trolley) but has particularly challenging first and last mile issues that would make it difficult to implement solutions relatively quickly.
- The SPRINTER Nordahl Road Station did not warrant much attention in the study for two reasons. First, the area surrounding it is fairly low density employment. Second and more significantly, with opening of a new hospital in Escondido, the hospital and the North County Transit District are partnering to provide a shuttle between the existing hospital in downtown Escondido and the new hospital site west of I-15 that would also serve the Nordahl SPRINTER Station. This shuttle will provide a first and last mile solution for the station.
- The Carlsbad Village Station was eliminated from further consideration because although it ranked highest among the COASTER stations evaluated, it ranked much lower among all stations (23rd) relative to the other topped ranked stations. In addition, the Carlsbad Village Station is located in an area with low employment density, few large employers nearby, and only moderate population density.
- The population and employment characteristics in the vicinity of the 24th Street Station on the Trolley Blue Line are very similar to the 32nd & Commercial Station on the Orange Line. Since 32nd & Commercial Station ranked higher, the 24th Street Station was eliminated from further consideration.
- The Kearny Mesa Transit Center was identified by SANDAG as a good candidate for a last mile solution due to its high employment densities in the vicinity of the station, concentration of large employers, high transit ridership to the station, and relatively poor station access. Also, several employers in the area have contacted SANDAG and iCommute in the past about providing additional help in getting their employees to and from work on transit. Finally, new BRT service will begin serving the transit center in 2013 providing more opportunity and need for a first and last mile connection.
- The 32nd & Commercial Station on the San Diego Trolley Orange Line was identified as a good candidate for a first mile solution due to the compact residential nature of the area and the opportunity to evaluate improved bicycle and pedestrian access in addition to vehicular access options.

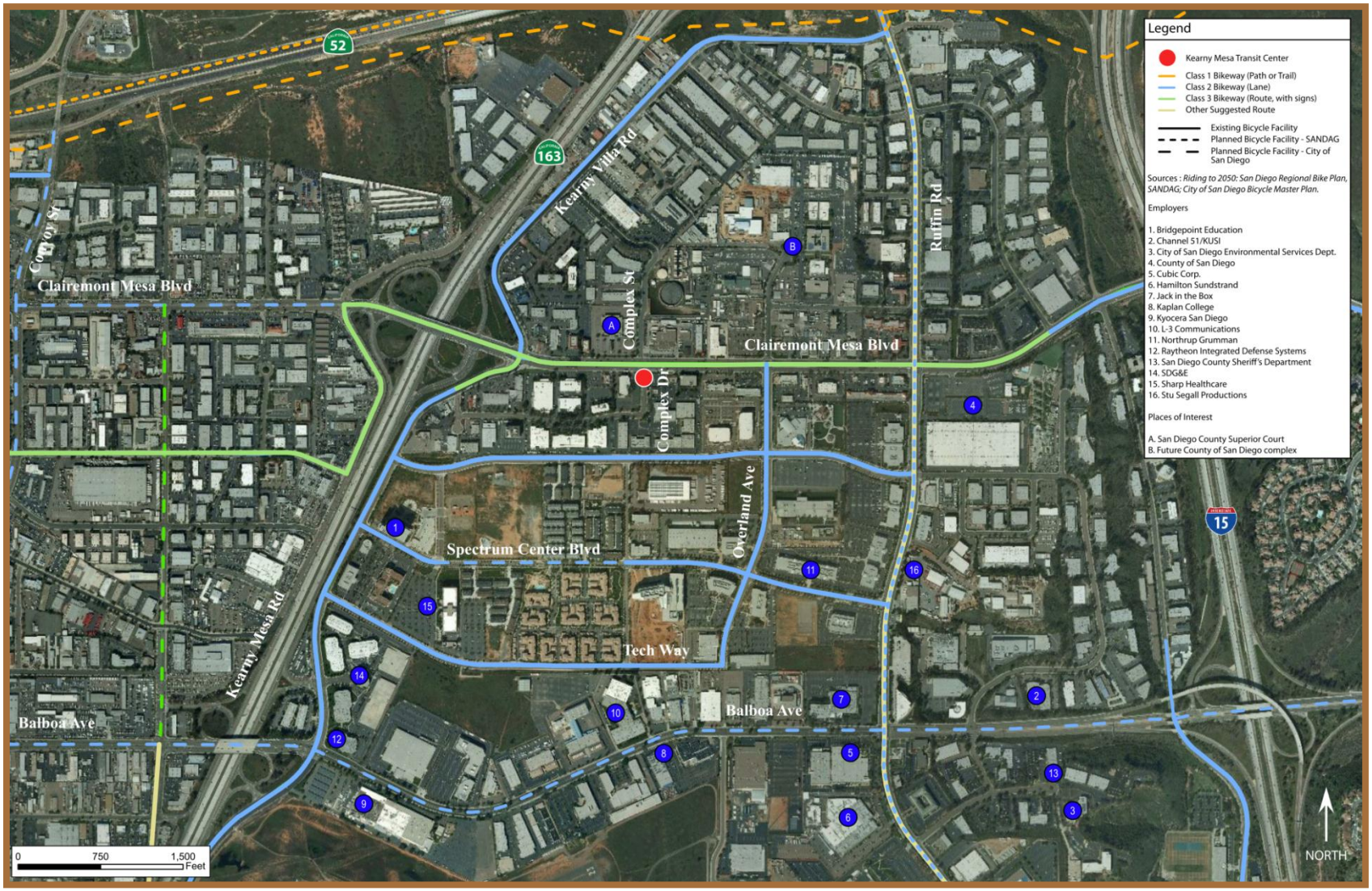
3.5 Selected Stations – Site Visits

The two selected stations' study areas were defined using physical and geographical boundaries, freeways, and community planning areas to capture the logical stakeholders and access markets around each station. Figure 4 depicts the Kearny Mesa Transit Center station area.

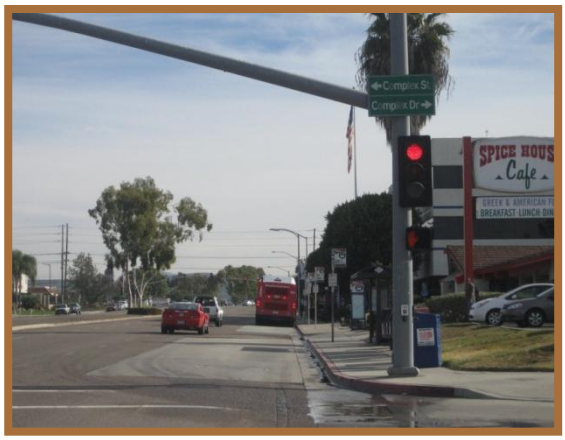
Figure 4: Kearny Mesa Transit Center Area

The Kearny Mesa Transit Center study area is bordered by I-805, SR-52, I-15, and Balboa Avenue. The Kearny Mesa Transit Center itself consists of simple curbside bus stops located along Clairemont Mesa Boulevard east of Complex Drive and along Complex Drive—south of Clairemont Mesa Boulevard. Standard bus shelters and benches are located along the typical 5-foot sidewalks immediately adjacent to streets. Together, these stops create an L-shaped facility that serves bus routes headed in all directions. Passengers transferring between routes at the Kearny Mesa Transit Center may be required to cross Complex Drive to access connecting routes. Land uses immediately adjacent to the transit center consist of low intensity commercial activities (a restaurant, retail shops, and banks) with parking located between the transit center and the buildings. The County of San Diego Traffic Court is located across Clairemont Mesa Boulevard from the transit center. As shown in Figure 5, there are several large employers and business centers within reasonable walking, biking and shuttle distance from the station, including the County of San Diego, Bridgepoint Education, Sharp Healthcare, and San Diego Gas & Electric. While there are scattered multi-family residential complexes within the larger station area, due to its location in one of the region's largest employment centers, the Kearny Mesa Transit Center is best suited for last mile solutions that would bridge the gap for transit riders between the transit center and their employment destinations.

Figure 5: Kearny Mesa Transit Center – Nearby Employers, Activity Centers, and Bicycle Routes



Kearny Mesa Transit Center – Complex Drive Stop



Kearny Mesa Transit Center – Clairemont Mesa Boulevard Stop

32nd & Commercial Street Station

Figure 6 shows the 32nd & Commercial Station study area and Figure 7 displays the nearby bicycle routes. The 32nd & Commercial Station area is bordered by the 28th and 30th Streets on the west, I-805 on the east, SR-94 on the north, and National Avenue on the south. The defined station area excludes the neighborhoods to the west (closest to downtown San Diego) since these neighborhoods have access to downtown light rail stations and multiple bus routes. The station is an off-street light rail station located on a curve with separate passenger platforms to serve east and westbound trains. Station facilities are minimal and consist of a few benches and no shelters. A church with a small parking lot is located immediately adjacent to the station on the north and a fence along the entire southeastern edge of the station separates the station from a large storage yard. The surrounding community is a mix of commercial/industrial uses, particularly along Commercial Avenue and older, generally small lot, single-family homes. I-15, which extends through the station area in a north-south direction, splits the area into west and east sides of the freeway. There is a Costco and a few larger employers east of I-15 and north of Market Street in the Gateway Center beyond walking distance of the station, and some smaller industrial businesses north of Market Street west of I-15 on the edge of a reasonable walking distance from the station. Given that the character of the neighborhood is largely residential (with smaller industrial employers), the 32nd & Commercial Station is best suited for first mile solutions that would improve access to transit for residents of the community.

Site visits to the Kearny Mesa Transit Center and 32nd & Commercial Station areas were conducted in December 2010 to take an inventory of barriers to access that could guide consideration of first and last mile solutions. The site visits encompassed the entire area within the defined boundaries of each station area but focused on the more immediate vicinity of the station. Table 4 summarizes the observations and findings from the station area site visits.

Figure 6: 32nd & Commercial Station Area

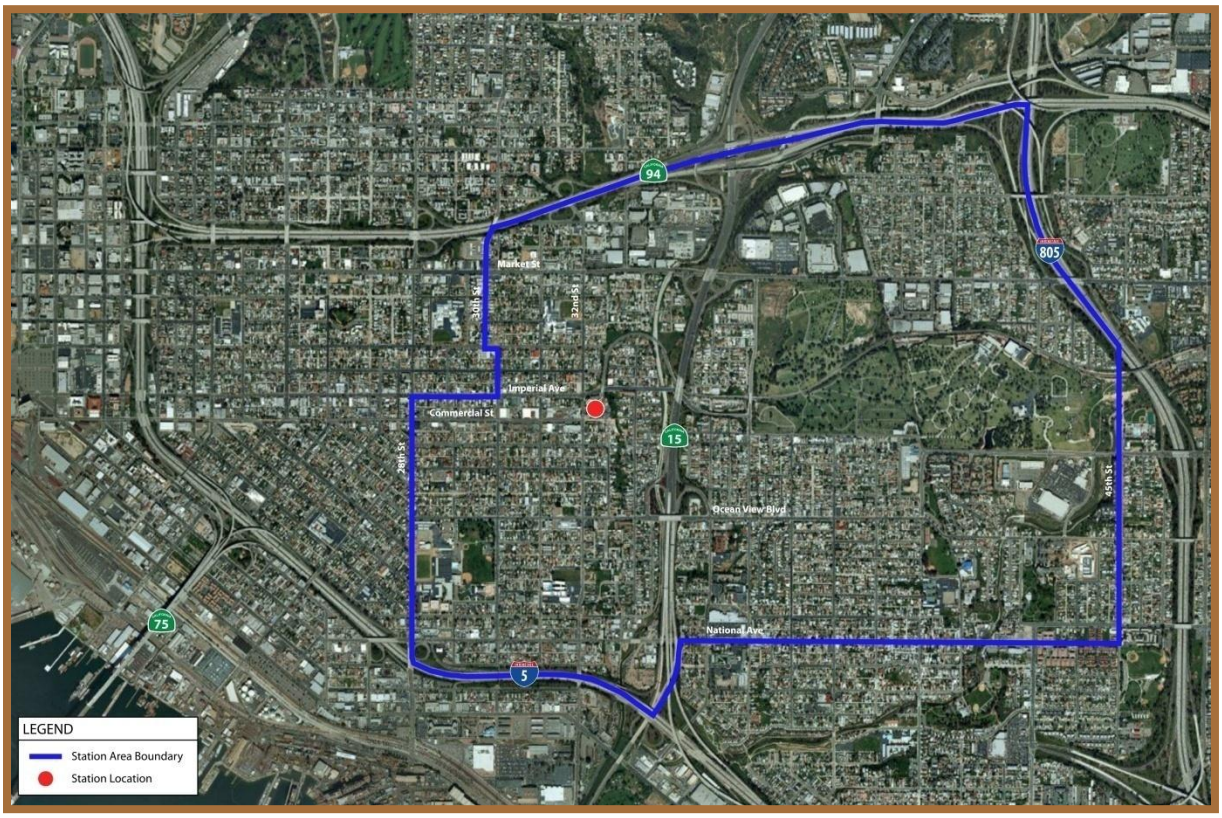


Figure 7: 32nd & Commercial Station Area – Nearby Bicycle Routes

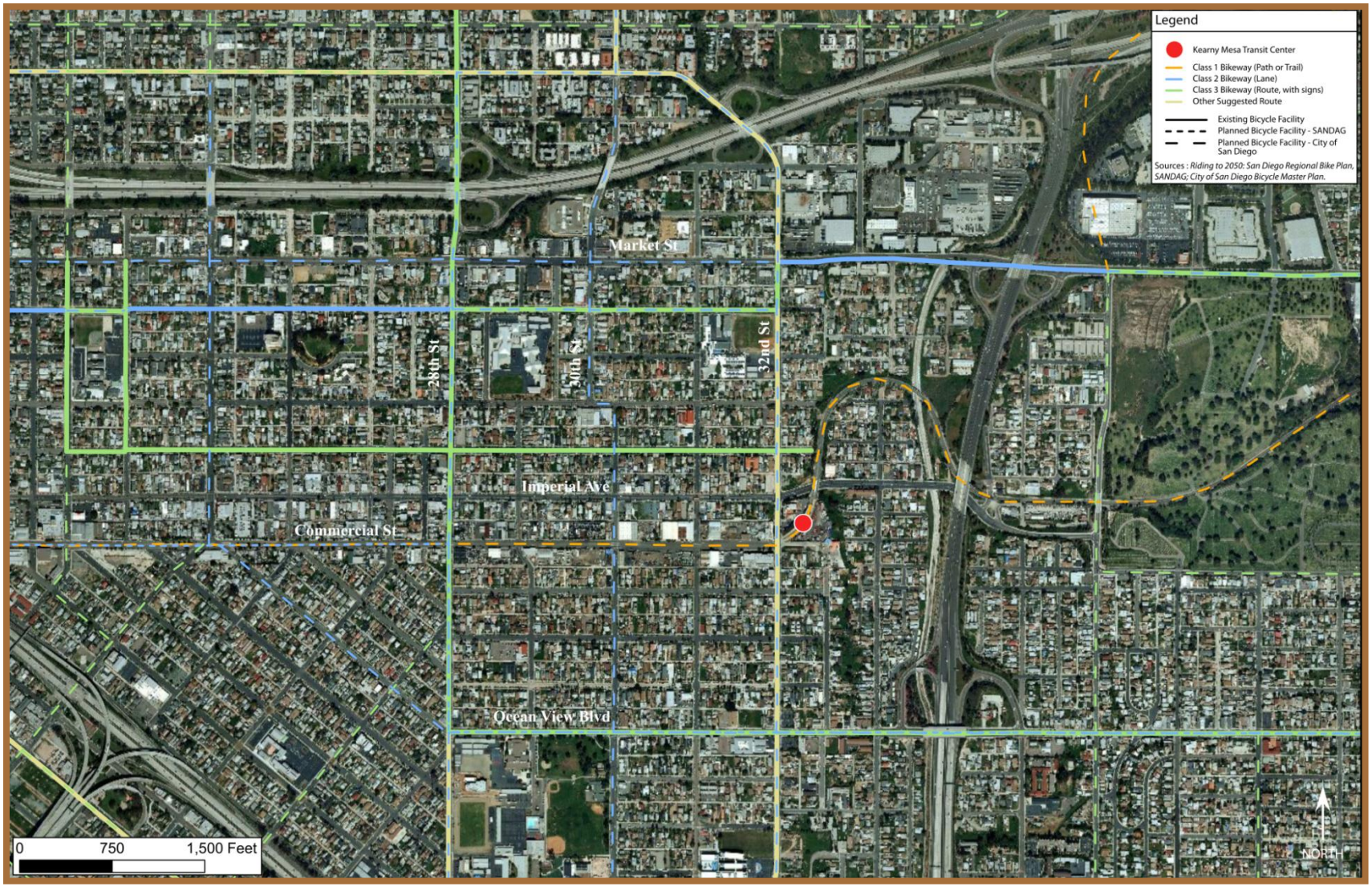


Table 4: Kearny Mesa Transit Center and 32nd & Commercial Station Site Visits – Access Barrier Observations and Findings

Access Barrier Issue	Kearny Mesa Transit Center	32nd & Commercial Station
Pedestrian Access and Traffic Safety	• Clairemont Mesa Boulevard is a wide 6-lane arterial street that creates an intimidating pedestrian crossing. • The transit center area street network consists of wide arterials and long blocks (creating a disconnected street grid) with discontinuous sidewalks which require pedestrians to cut through private property and parking lots to reach the transit center. • Other than typical 5-foot sidewalks immediately adjacent to the street, there are few pedestrian enhancements in the street network surrounding the station. • There is limited direct pedestrian access to the south where much of the residential concentrations in the vicinity of the station are located (Paramount Drive and Spectrum Center Drive). • The intersections adjacent to the transit center are not Americans with Disabilities Act (ADA) compliant. Each corner of the intersection has a single diagonal curb ramp leading into the intersections rather than the required two ramps per corner facing into each crosswalk. • Lightwave Avenue has a curb ramp that leads from a dead end sidewalk directly into the street with no crosswalk. There is a need for a midblock crosswalk connecting this curb ramp into Paramount Drive. • Although crosswalks exist along Clairemont Mesa Boulevard over SR-163 (to the west of the station) the crossing over the freeway is a barrier to pedestrian access due to the multiple freeway on-/off-ramps. • There are major concentrations of employment north of Clairemont Mesa Boulevard, most of which are beyond reasonable walking distance.	• The street grid approaching the station from the north and south is generally pedestrian friendly with several intersections and pedestrian crossings providing various routes to the station. • There are limited sidewalks along Commercial Street to the west of the station due to the commercial loading docks and warehouse uses. • Signal timing at crosswalks allowed adequate time for pedestrians to cross. • Due to topography, the only access from the Imperial Avenue (north) side of the station is via a long staircase which is not ADA accessible. • Curb ramps surrounding the station are in need of updating to be ADA compliant. • Some sidewalks leading to the station are in disrepair.

Table 4: Kearny Mesa Transit Center and 32nd & Commercial Station Site Visits – Access Barrier Observations and Findings (continued)

Access Barrier Issue	Kearny Mesa Transit Center	32nd & Commercial Station
Auto Access and Parking	• There is limited public on-street parking near the transit center. • The off-street parking in the immediate vicinity of the transit center is associated with the commercial and office businesses. • There is no designated on- or off-street parking available at the transit center for park and ride purposes. (The adjacent Bank of America off-street parking lot appears underutilized and there may be an opportunity to share some of this supply for park-and-ride and carpool/vanpool/carshare programs.) • There is no designated passenger pick-up/drop-off location at the transit center; such activities would need to occur along the street curb which is used for the bus stops and on-street parking.	• On-street parking is limited in the vicinity of the station and is well utilized by the surrounding neighborhood. • The off-street parking in the immediate vicinity of the station is associated with the adjacent church, commercial properties and private residences. • There is no designated on- or off-street parking available at the transit center for park and ride purposes. • There is no designated passenger pick-up/drop-off location at the station and such activities would likely occur near the light rail transit (LRT) tracks or via double-parking, both creating safety issues.
Bicycle Access	• There are designated bicycle routes within the station study area on some arterials and side streets but not on Clairemont Mesa Boulevard. • No bicycle lanes or facilities exist along Clairemont Mesa Boulevard. • Kearny Villa Road and Tech Way, each with two lanes in each direction provide bike lanes within ½ mile of the station. • There are no bicycle storage facilities at the transit center.	• The stairway access on the north side of the station (to Imperial Avenue) impedes bicycle access since cyclists have to lift and carry their bicycles up the long staircase. • Signed bicycle routes are located on L Street and Imperial Avenue near the station but other designated bicycle routes are limited. There are no bicycle storage facilities at the station.
Site Amenities and Identity	• The minimal infrastructure (passenger platforms, shelters, benches, lighting, signage) at the transit center and its location along the street creates an unattractive and intimidating waiting environment for transit riders. • There is no identification signage or recognizable branding features at the transit center site. It appears to be a typical bus stop. • There is no wayfinding signage within ½-mile of the transit center limiting the ability of transit users to find the station. • Maps and schedule information were provided at the station.	• There are no passenger shelters at the station. • There is no wayfinding signage within ½-mile of the station limiting the ability of transit users to find the station, particularly from nearby parallel arterials where passengers may transfer to and from bus transit along those streets. • Maps and schedule information are located at the station.

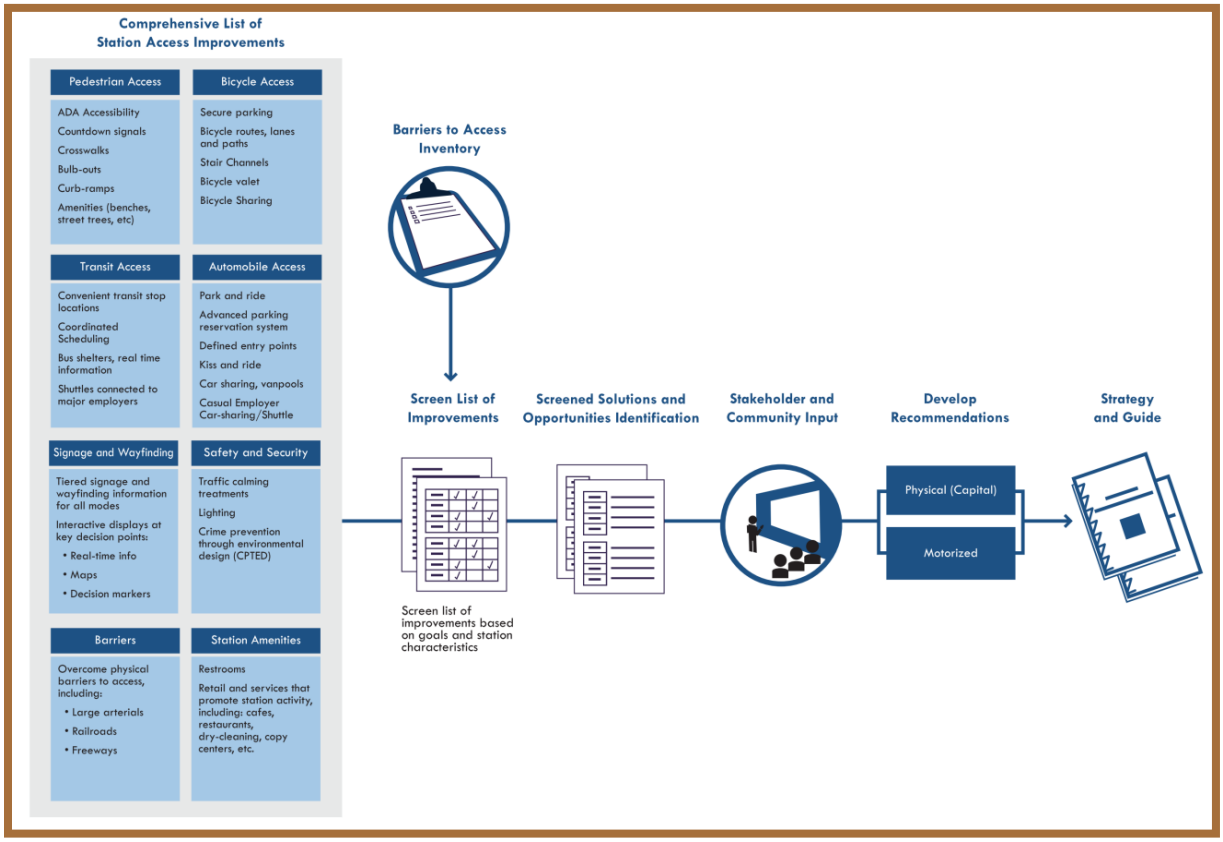
Table 4: Kearny Mesa Transit Center and 32nd & Commercial Station Site Visits – Access Barrier Observations and Findings (continued)

Access Barrier Issue	Kearny Mesa Transit Center	32nd & Commercial Station
Personal Safety	• Pedestrian activity surrounding the station was limited due to auto orientation of the area and adjacent land uses. • Some loitering was observed at this station. • Sidewalks leading north from the station (across Clairemont Mesa Boulevard along Complex Street) and south of the station (along Complex Drive) have no pedestrian scale lighting.	• The station has an isolated feeling due to its location between residential and industrial warehouse uses. • The curvature of station platform limits line of sight and visibility to and from the station platform. • The north staircase connecting the station platform to Imperial Avenue is poorly lit and removed from public view. • The tall fence south of the station blocks the view from the southeast station approach and limits the line of sight to and from the platform. • Lights and security cameras are located along the length of the station platform. • There does not appear to be pedestrian scale lighting on the approaches to the station. • Loitering occurs at the station.

4 Solution Options

The study analysis and the Kearny Mesa Transit Center and 32nd & Commercial Station site visits have identified both physical barriers in the vicinity of the stations and the barriers created by distance between origins/destinations and the stations. To address these access barriers, a comprehensive list of potential station access solutions was developed as a resource for identifying appropriate solutions for each station. This comprehensive list was then screened for each station based on the study goals and objectives and the unique access barriers for each station. The identified solutions were then presented to station area stakeholders, including station transit riders, employees and residents in the respective station areas, and interested individuals and employers (see Section 5), for further input and refinement. A prioritized list of the most promising first and last mile solutions (both physical and motorized) was then identified for each station followed by a strategy and guide for implementation of the motorized solutions. The first and last mile solutions identification and screening process is displayed in Figure 8.

Figure 8: First and Last Mile Solutions Identification, Screening, and Recommendation Process



4.1 Comprehensive List of Potential Station Access Solutions

The comprehensive list of potential first and last mile access solutions was developed as a resource for identifying appropriate solutions for each station. The comprehensive list of potential solutions is shown in Table 5.

4.2 Screened Solutions and Opportunity Identification

Comparing the barriers to access observations and findings for each station (Table 4) with the comprehensive list of potential solutions (Table 5) resulted in screened solutions and identified opportunities. These screened solutions and identified opportunities were presented to the stakeholders to develop recommendations for specific solutions for each station. The screened solutions for each station are listed below.

Kearny Mesa Transit Center Screened Solutions for Further Consideration

Pedestrian Access and Traffic Safety Improvements

- Implement traffic calming designs at the intersection of Clairemont Mesa Boulevard and Complex Drive such as corner bulb-outs, unique crosswalk paving, or other features that would alert drivers that the intersection exists for pedestrians as well as cars. Traffic volumes on Clairemont Mesa Boulevard are generally Level of Service (LOS) B or C, indicating that implementing traffic calming in the area should have minimal impact on traffic capacity.
- Widen the sidewalks along Clairemont Mesa Boulevard on the blocks approaching the transit center.
- Upgrade the sidewalks and curb ramps within ¼-mile walking radius of station to meet ADA standards.
- Close gaps in the pedestrian network by completing sidewalks or creating formal pedestrian paths through private property, particularly to the south from Complex Drive to Paramount Drive and Spectrum Center Drive.

Auto Access Improvements

- Add a passenger drop-off/pick-up zone (kiss-and-ride) at the transit center.
- Acquire, though purchase or agreement, parking spaces from adjacent property owners (i.e., Bank of America) for last mile carpools/vanpools and commercial carsharing programs.

Bicycle Access Improvements

- Provide bicycle storage lockers (possibly located on Bank of America site).
- Develop a bikesharing program with nearby employers.
- Implement the bikeways identified in SANDAG's 2050 Regional Bike Plan and the City of San Diego's Bicycle Master Plan within 1 mile of the transit center.

Table 5: Comprehensive List of First and Last Mile Solutions

Solution	Definition	Photo
Pedestrian Access		
Curb ramps	Perpendicular curb ramps are often installed in pairs at a corner. The level landings of the curb ramps are typically paired with truncated dome tactile strips to provide wayfinding information to people with visual impairments.	
Countdown signals	Visible and audible signals that countdown, with chirps for people with visual impairments, aid pedestrians to cross the street. Pedestrian signal timing is typically 4 feet per second at a minimum.	
Crosswalks	Crosswalks are designated pedestrian paths to cross the street safely. They are typically installed at intersections or areas such as near transit stations, where large numbers of pedestrians are attempting to cross.	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

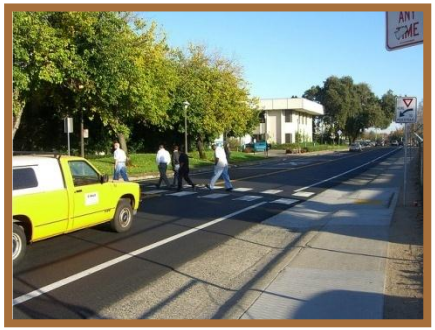
Solution	Definition	Photo
Pedestrian Access (continued)		
Mid-Block Crossings	Midblock crosswalks are typically installed when blocks are more than 600-800 feet on a side. Midblock crosswalks slow down traffic in the immediate vicinity, and they discourage pedestrians from crossing between parked cars. They can be paired with a pedestrian signal and in-pavement flashing lights.	
Sidewalk Width	Effective sidewalks are close to 10 feet wide to accommodate pedestrian volumes, passing space, room for wheelchair travel, and "buffer" space (the areas pedestrians avoid near curbs and buildings).	 http://photoresearch.beethomas.com/man-in-wheelchair-in-cheynne-wyoming/
Pedestrian Gap Closures	Closing gaps within the pedestrian network improves pedestrian access by creating an interconnected network. Gaps may include missing sidewalks, curb ramps, or crosswalks.	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Pedestrian Access (continued)		
Traffic Calming	Traffic calming installations, such as raised crosswalks, are intended to slow or reduce motor-vehicle traffic to improve pedestrian safety.	 http://publicworks.kingsporttn.gov/traffic/traffic-calming
Automobile Access		
Park and ride parking	Dedicated off-street parking supply for riders within ¼ mile walking distance of the transit station.	 http://www.wlabt.com/
Advanced parking reservation systems	Tools that allow customers make parking reservations in advance, or an on-line reservation system. Allows planning for short term daily parking and long term airport parking.	 http://www.parkwhiz.com/support/eticket/

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

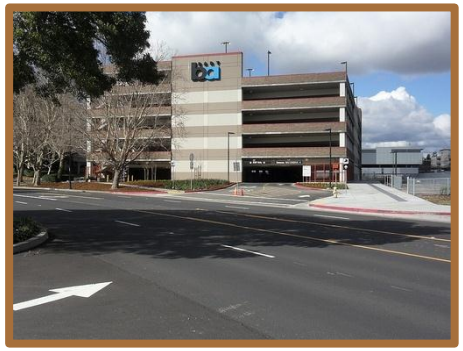
Solution	Definition	Photo
Automobile Access (continued)		
Defined entry points	Well-signed and designated entrances to station for automobile patrons to facilitate quick entry and exit and access to the transit system.	
Passenger Drop-off/pick-up (Kiss-and-Ride) area	Short-term passenger loading/unloading area where vehicles can typically stay for a maximum of 10 minutes.	
Carsharing, vanpools parking	Parking spaces designated and reserved for commercial carsharing program vehicles to allow for the last mile connection from the station to work or other destinations	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Automobile Access (continued)		
Carpool / Vanpool Parking	A parking spot is reserved at the station for overnight parking for last mile carpool/vanpool vehicles that are used between the station and employment sites	
Bicycle Access		
Bikeways	Bicycle routes, lanes and paths are laid out according to county and city master bicycle plan. Essential links should be made to connect bicycle route system to the station.	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

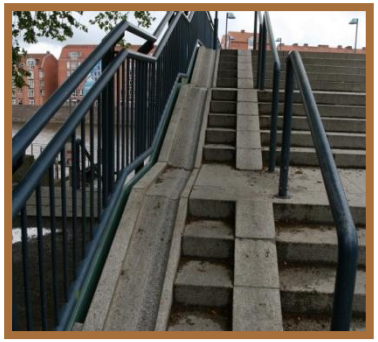
Solution	Definition	Photo
Bicycle Access (continued)		
Secure Bicycle Parking	Bicycle storage lockers and two-point lockable bicycle racks provide enhanced security for bicycle parking.	
Stair channels	Channels along stairwells allow bicyclists to roll bikes up and down a staircase without need of lifting and carrying bicycle.	
Bicycle Valet/Staffed Bicycle Parking	An in-station program that provides supervised bicycle parking and may also provide bicycle maintenance services.	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Bicycle Access (continued)		
Bicycle Sharing	A program that provides bikes to riders to connect from the station to their final destination. This program is set up as a daily or hourly rental service. It may be administered as a self service program with a kiosk payment system or managed with a bicycle valet manager.	
Amenities		
Passenger Platforms	Passenger platforms are typically provided at major stations and transit centers. They are typically designed to be 12 to15 feet wide.	
Shelters and Benches	Bus shelters are structures typically installed on the sidewalk with seating and weather protection.	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Amenities (continued)		
Real-time information	Real-time information provides bus/train arrival information as a live feed at the station.	
Wayfinding signage - all modes	Large directional signs to identify station location at common approaches to the station, followed by directional signs for automobiles, bikes and pedestrians at key decision points to lead transit users to the station.	
Retail services	Retail services such as cafes & restaurants, dry-cleaning, tailor, copy center, convenience store, and pharmacy supports station activity.	 http://www.bayareavision.org/corridors/ecr/ecr-existing.htm

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Personal Safety		
Landscaping	Clean, clear and attractive landscaping enhances visibility and maintains line of sight.	
Lighting	Lighting areas that might not always be active can discourage loitering.	
Security Cameras	Security cameras are typically installed at stations or in transit vehicles in hopes of deterring crime.	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Personal Safety (continued)		
Station Kiosks	Kiosks are merchant operated units, typically located in high visibility areas such as transit stations, where food or merchandise of any variety is sold.	
Vehicular Transportation Access		
Public Shuttles	Public shuttles are a bus service designed to transport people to and from a specific destination with limited or no intermediate stops.	
Private Employer Shuttles	Employer shuttles transport employees between major employers and transit stations. These can be owned and managed by one employer or a consortium of employers grouped by a business park location. The consortium of employers may be considered part of a transportation management association (TMA).	

Table 5: Comprehensive List of First and Last Mile Solutions (continued)

Solution	Definition	Photo
Vehicular Transportation Access (continued)		
Employer Carpools / Vanpools	Car or van shuttle operated by employee volunteer or employer paid drivers that picks employees up from last mile station at scheduled time in the morning and delivers them back in the evening.	 Daveamenta.com
Coordinated Carpools	Car or van owned by an employee volunteer who picks employees up from the last mile station at a scheduled time in the morning and delivers them back in the evening.	 Upenn.edu

Amenities

- Provide wider passenger waiting platforms along Clairemont Mesa Boulevard and Complex Drive to increase passenger comfort and create more distance between street traffic and waiting passengers.
- Provide more-substantive, branded passenger shelters at the transit center.
- Provide more passenger seating at the transit center.
- Provide real-time transit vehicle arrival information at the transit center.
- Provide signage and wayfinding decision markers within ½ mile of the transit center and at freeway approaches.
- Create a station "trademark" identification sign and/or architectural features.

Personal Safety

- Add pedestrian-scale lighting along the Complex Street and Complex Drive approaches to the transit center.

Motorized Improvements

- Encourage area employers to individually or jointly provide an employer shuttle between the transit center and employment sites.
- Develop a SANDAG/employer partnership to provide shuttles between the transit center and employment sites.
- Develop a program to create and encourage employer carpools/vanpools between the transit center and employment sites.
- Develop a program to create and encourage coordinated carpools (employee-owned vehicles) between the transit center and employment sites.

32nd & Commercial Station Screened Improvements for Further Consideration

Pedestrian Access and Traffic Safety Improvements

- Implement sidewalks or designated pedestrian paths along Commercial Street approaching the station.
- Upgrade the sidewalks and curb ramps within ¼-mile radius of station to meet ADA standards.
- Repair sidewalks within ¼-mile radius of the station.

Auto Access Improvements

- Add a designated passenger drop-off/pick-up zone (kiss-and-ride) at the station near the 32nd Street entrance.
- Negotiate an agreement with the church adjacent to the station for shared-use parking spaces.

Bicycle Access Improvements

- Provide secure bicycle lockers at the station.
- Implement a stairway bike channel along the stairs from the north side of the station to Imperial Avenue.
- Implement the bicycle lanes and paths identified in SANDAG's 2050 Regional Bike Plan and the City of San Diego's Bicycle Master Plan within 1 mile of the transit center.

Amenities

- Implement real-time schedule information at the station. (This is planned as part of the MTS Orange Line rehabilitation project.)
- Provide signage and wayfinding decision markers within ¼-mile of the station, particularly along Imperial Avenue, Market Street, and Ocean Boulevard.
- Add passenger shelters at the station.

Personal Safety

- Add pedestrian scale lighting along 32nd Street and Commercial Street approaching the station.
- Improve lighting along stairway and under LRT bridge over Imperial Avenue.
- Remove southeastern fence or replace with transparent fencing.
- Coordinate with adjacent property owners (church, businesses) to improve station area environment (lighting, shrubbery trimming, sidewalk repair, etc.).

Motorized Improvements

- Develop a SANDAG/employer partnership to provide shuttles between the transit center and employment sites in the Gateway Center area.

5 Stakeholder Input

Stakeholder input was sought on the barriers to access at each station and the screened solutions that might help overcome those barriers. The goals of the stakeholder input were to ascertain which potential first and last mile solutions might have the most success in overcoming the barriers and attracting transit riders.

As a result, it was especially important to survey transit riders who may be intimately familiar with the barriers to access and non-users of transit to determine what access barriers might be preventing them from taking transit. For the study purpose, a qualitative, non-statistically significant survey approach was implemented and deemed sufficient to provide useful data.

Stakeholders included transit riders, residents, employees, employers, planning group members, and community leaders. Kearny Mesa Transit Center area stakeholders would primarily be transit riders, employees, and employers since the need at this station is primarily for a last mile solution (from the transit center to work site). 32nd & Commercial Station area stakeholders would be primarily transit riders, residents, and planning and community group members since the need at this station is primarily for a first mile station (from home to station). Identified stakeholder groups for each station is included in Appendix B.

5.1 Intercept and Web Surveys

Stakeholder input was obtained in three ways:

- Intercept surveys at the stations
- Web-based surveys administered through employers
- Meetings with interested employers and individuals.

Intercept Surveys

Transit riders were the target stakeholders for the intercept surveys, which were conducted at each station on one weekday from 6 a.m. until 6 p.m. (although most of the responses were obtained during the peak periods). The SANDAG survey team administered the surveys, which questioned the respondents about the following:

- Mode of access to the station
- Purpose of travel
- Origin/destination
- Usage frequency
- Alternatives available
- Station deficiencies and needs
- Station access issues and barriers
- Likelihood that they would use a variety of described access solutions (the screened solutions)
- Any ideas or suggestions they might have regarding access to the station.

The intercept survey questionnaires are included in Appendix C1.

Web-based Surveys

The target stakeholders for the Web-based surveys were employees for the Kearny Mesa Transit Center area and residents for the 32nd & Commercial Station area. SANDAG coordinated with employers in the Kearny Mesa Transit Center area to provide information about the surveys to their employees and encourage response. SANDAG asked community groups in the 32nd & Commercial Station area to distribute information about the resident survey. The Web-based survey questionnaires asked respondents about the following:

- Use of the station
- Purpose of travel
- Origin/destination
- Travel frequency
- Travel alternatives
- Station deficiencies and needs
- Station access issues and barriers
- Likelihood that they would use a variety of described access solutions
- Any ideas or suggestions they might have regarding access to the station.

The intercept survey questionnaires are included in Appendix C2.

SANDAG had intended to conduct focus groups to delve further into barrier issues and promising solutions but found it challenging to solicit interest in focus-group participation. In lieu of formal focus groups, SANDAG met with interested individuals to get their perspectives and input on potential

access solutions. Several individuals were associated with the County of San Diego, which is one of the largest employers in the Kearny Mesa Transit Center area with plans to move more county employees to Kearny Mesa over the next few years.

5.2 Results and Conclusions

Although the number of survey responses was small, particularly for the web-based surveys, useful information could be gleaned from them. Key survey results provided information on the following:

- Station access deficiencies noted most often (poorest-rated station features)
- Station features rated worst at meeting access needs (worst at meeting needs)
- Station access features identified most often as those that would encourage respondents to use transit (more likely to ride)
- Station features noted most often as those that would make it easier to access the station (makes it easier).

A summary of the above findings for each station are included in Tables 6 and 7.

Table 6: Kearny Mesa Transit Center Station Key Survey Findings

Transit Rider Intercept	
Worst at Meeting Needs (Question 7A – 7H)	**Responses***
Bike Racks	47%
Lighting	27%
Security	26%
What Makes It Easier? (Question 6)	
Shuttle	21%
Dedicated pick up/drop off	13%
Fix sidewalks/better lighting	7%
More sidewalks	6%

Web-based – Employees	
Likely to Ride if Added/Improves (Question 10)	**Responses****
Transportation between station/work	83%
Bike Share Program	83%
Car Share Program	71%
Bike Lanes between station/work	67%
More Sidewalks between station/work	67%
Employer Carpool Program	50%
Better Lighting Along Route	50%

Table 7: 32nd & Commercial Station Key Survey Findings

Transit Rider Intercept	
Poorest Rated Features (Question 7A-7H)	**# of Responses***
Bike lanes	34%
Signs to station	16%
Safe routes to station	13%
Worst at Meeting Needs (Question 9A-9J)	
Bike racks/lockers	56%
Security	36%
Parking	32%
Lighting	24%

Web-based – Residents	
Likely to Ride if added/improved (Question 6)	**# of Responses****
Parking transit to station	100%
Pick up/drop off	88%
Bike lanes	75%
Lit sidewalk	72%
Bike Racks/lockers	72%
Disability access	57%

*On a scale of 1-5 in which 1 = Very Poor and 5 = Very Well, the percentage of who responded 1 or 2
**Includes Very Likely, Likely, Somewhat Likely Responses

The survey results for the Kearny Mesa Transit Center indicate the following kinds of improvements could go the farthest to improve access and encourage transit use:

- Bicycle facilities, including storage, designated bike routes, and bike share programs
- Motorized transportation between the transit center and work sites, including shuttles and carsharing
- A convenient, safe auto drop-off/pick-up location at the transit center
- More and better sidewalks
- Lighting and security.

The survey results for the 32nd & Commercial Station indicate the following kinds of improvements could go the farthest to improvement access and encourage transit use:

- Bicycle facilities, including storage and designated bike routes
- Wayfinding signage to the station
- Security, including lighting along routes to the station
- Parking at the station
- A convenient, safe auto drop-off/pick-up location at the transit center.

Meetings with interested individuals in the Kearny Mesa Transit Center area provided the following personal insights:

- Implementing motorized last mile solutions to major employment sites in the Kearny Mesa area should be a priority.
- Motorized solutions should focus on coordination with employers such as the sheriff's department, FBI, DEA, Solar Turbines, and Jack-in-the-Box.
- The County of San Diego owns land at Ruffin Road and Kearny Mesa Boulevard that might be a good site to relocate the transit center to provide an off-street facility.
- SANDAG should expand promotion of the eco-pass program that provides discounts to employers for bulk purchase of transit passes.
- A ¼-mile walking distance from the transit center to work sites is acceptable but the sidewalks in the area could be better.
- It could be a challenge to generate interest in employer-provided carpools from the transit center as the County of San Diego, and possibly other employers would not be able to assume the cost of a carpool fleet.

Additional information garnered from meetings with interested individuals who are employed by the County of San Diego revealed that the county is expanding its facilities on Overland Avenue north of Clairemont Mesa Boulevard, which is one (long) block east of the Kearny Mesa Transit Center. The new county campus will ultimately have approximately 900,000 square feet of new office space in six 4-story buildings and an 84,000-square-foot Medical Examiner and Forensic Center building. Construction of the first two buildings was completed in October 2010, and two additional buildings are scheduled for completion in spring 2012. The remaining build-out, subject to funding approval,

would be completed in 2014. The county plans to consolidate employees located throughout the region, particularly those in downtown facilities. To address the transportation burden placed on relocated employees who previously took transit to downtown locations, the county has implemented a free weekday peak period employee shuttle service between downtown San Diego (from America Plaza where employees can transfer from Trolley, COASTER and bus routes) and its Overland Avenue campus. In addition, the County provides shuttle service throughout the day within Kearny Mesa to transport county employees among county offices and facilities in the Kearny Mesa area. The shuttle service is provided by a contractor and the peak period downtown to Kearny Mesa portion is funded through the County Operations Center construction project. This existing all-day and peak-period (albeit temporarily funded) shuttle service may provide opportunities for funding partnerships with other Kearny Mesa area employers and/or SANDAG to expand service to the Kearny Mesa Transit Center and multiple employers.

6 First and Last Mile Solutions Recommendations

Drawing from the comprehensive list of solutions, site visits, community input, and the study goals and parameters, first and last mile solution recommendations for Kearny Mesa Transit Center and 32nd & Commercial Station were developed. These station access solution recommendations are divided into two categories:

- Physical (Capital) Solutions – physical improvements at and near the stations; and
- Motorized Solutions – shuttle, carpool, or vanpool connections between the stations and origins/ destinations.

Based on station area characteristics, SANDAG identified physical solutions for both the Kearny Mesa Transit Center and the 32nd & Commercial Station, but motorized solutions for Kearny Mesa Transit Center only.

6.1 Kearny Mesa Transit Center Last Mile Solution Recommendations

Physical Solutions

Objective: Improve pedestrian access

Recommended Solutions:

- Add new pedestrian connections to residential areas to the south of the station on Paramount Drive and Spectrum Center Drive.
- Widen sidewalks along Clairemont Mesa Boulevard east of the transit center and upgrade ADA ramps between the transit center and county facilities on Overland Avenue.
- Implement traffic-calming designs at the intersection of Clairemont Mesa Boulevard and Complex Drive, and at the intersection of Clairemont Mesa Boulevard and Overland Avenue such as corner bulb-outs, unique crosswalk paving, or other features, which would alert drivers that the intersection exists for pedestrians as well as cars.

- Conduct a walk-audit of the station area as part of the planned February 2012 visit to SANDAG by Dan Burden, Executive Director of the Walkable and Livable Communities Institute to further identify specific pedestrian access improvements in the Kearny Mesa Transit Center area.

Objective: Improve auto access

Recommended Solutions:

- Create a formal kiss-and-ride and drop-off location at the station may require ROW acquisition.
- Acquire, though purchase or agreement, parking spaces from adjacent property owners (i.e., Bank of America) for last mile carpools/vanpools and commercial carsharing programs.

Objective: Improve bicycle access

Recommended Solutions:

- Close gaps in the bicycle network in the station area, including on Balboa Avenue, Spectrum Center Boulevard, and Mercury Street.
- Sign Class III bicycle routes on Clairemont Mesa Boulevard.
- Implement the bicycle lanes and routes identified in SANDAG's 2050 Regional Bike Plan and the City of San Diego's Bicycle Master Plan that lead to and through the Kearny Mesa area.
- Add bicycle lockers at the station, possibly in the Bank of America parking lot.

Objective: Improve station amenities

Recommended Solutions:

- Provide wider passenger waiting platforms along Clairemont Mesa Boulevard and Complex Drive to increase passenger comfort and create more distance between street traffic and waiting passengers.
- Provide more-substantive, branded passenger shelters at the transit center.
- Provide more passenger seating at the transit center.
- Provide real-time transit vehicle arrival information at the transit center.
- Provide signage and wayfinding decision markers within ½ mile of the transit center and at freeway approaches.
- Create a station identification sign and/or architectural features to help brand the station and make it recognizable as a key transit hub.

Objective: Improve personal safety

Recommended Solutions:

- Add pedestrian-scale lighting approaching station, including on Clairemont Mesa Boulevard, Complex Drive, Complex Street, and Overland Avenue.

Physical Solutions Implementation

To implement the physical improvements in the Kearny Mesa Transit Center area, SANDAG should:

- Incorporate the associated capital investments into the 2013 I-15 BRT service and infrastructure project budget and development. The planned I-15 BRT provides an opportunity to make investments in the Kearny Mesa Transit Center to bring it up to BRT facility standards, including passenger amenities and branding.
- Incorporate the physical solutions into appropriate regional plans and capital improvement programs, including the SANDAG Regional Transportation Plan, Regional Comprehensive Plan, Transportation Improvement Program, I-15 BRT Project, and SANDAG Bicycle Master Plan.
- Work with the City of San Diego to incorporate the recommended physical solutions into local community plans and capital improvement programs.

Motorized Solutions

Objective: Improve motorized access

Recommended Solutions:

- Pursue programs and activities to encourage implementation of employer-sponsored shuttles between the transit center and work sites that would be owned and operated by private employers, either individually or through a consortium.
- Implement programs and activities to secure partnerships for SANDAG/employer-sponsored carpools in which:
    - Automobiles (or vans) may be owned by employers for use by employee carpools.
    - SANDAG and employers would partner to implement a program to identify drivers, carpool groups, and schedules.
    - The carpools would take employees from the transit station to the employment site in the mornings and back in the evenings.
    - Carpool vehicles would be parked at the employment sites during the day (and could double as company fleet vehicles during the day) and in designated parking spaces at the transit station overnight.
- Pursue programs and activities to encourage coordinated carpools in which:
    - Employees use their personal, privately owned vehicles for carpools from the transit station.
    - SANDAG and employers would partner to implement a program to connect willing employee drivers with transit-riding co-workers and coordinate pick-up and delivery schedules.
    - Drivers would stop at the transit center on their way to work in the mornings to pick up designated passengers before continuing to their work sites and make the reverse trip on their way home in the evenings.
    - SANDAG and/or employers might offer incentives to drivers to conduct the carpools.

To support implementation of the motorized solutions in the Kearny Mesa Transit Center area, a *Strategy and Guide for Engaging Employers in Last Mile Transportation Solutions* has been prepared as part of this study to provide SANDAG with a framework to identify, promote, and implement innovative partnerships for providing shuttle, carpool, and vanpool access between the station and major employment sites. SANDAG should actively pursue the identified strategies and steps to enter into partnerships with employers to implement motorized programs that address the last mile gap from the transit center to employment sites in the area. This guide constitutes the Pilot Project Implementation Plan for the *First Mile and Last Mile Solutions for Transit Centers* study.

Motorized Solutions Implementation

Implementing and funding motorized solutions can involve the public or private sectors, or more likely, a combination of both. Possible implementation and funding approaches for motorized solutions that SANDAG should consider include:

- Last mile pilot projects in the Kearny Mesa area may be competitive for federal Jobs Access Reverse Commute grant funding, which is awarded to transportation programs and services that promote access to jobs from lower-income communities. Implementation of the new all day I-15 BRT service in 2013 will provide a fast and direct transit connection between Mid-City San Diego and the Kearny Mesa Transit Center. Travel demand analyses conducted for the SANDAG Urban Area Transit Strategy in 2009 identified a strong demand from the largely residential communities in central San Diego (including Mid-City) to employment centers to the north, primarily Kearny Mesa and Sorrento Mesa. The Mid-City area has a higher percentage of low-income households than the region as a whole. A motorized last mile solution from the Kearny Mesa Transit Center would provide the final access piece for workers in Mid-City San Diego who will be able to take the new BRT to Kearny Mesa.
- The County of San Diego has implemented an employee shuttle from downtown San Diego to its Kearny Mesa site to provide a connection to regional transit services in downtown. SANDAG should seek opportunities with the county to have the shuttle serve the Kearny Mesa Transit Center, particularly as more county employees relocate to the expanding Kearny Mesa County facilities.
- The Industrial Environmental Association, a trade organization of industrial companies, includes many large employers in the Kearny Mesa area. This association actively monitors and participates in a number of issues and activities that affect its members, including land use planning, transit and transportation, and regulatory issues. Similar regional organizations such as the San Diego Economic Development Corporation, the San Diego Regional Chamber of Commerce and other industry specific associations may provide opportunities for SANDAG to connect with employers in the Kearny Mesa area, highlight the last mile gap issue, and seek implementation and funding partnerships through a larger group or employers.

6.2 32nd & Commercial Station First Mile Solution Recommendations

Physical Solutions

Objective: Enhance pedestrian access

Recommended Solutions:

- Implement sidewalks or designated pedestrian paths along Commercial Street approaching the station.
- Upgrade the sidewalks and curb ramps within ¼-mile radius of station to meet ADA standards.
- Repair sidewalks within ¼-mile radius of the station.

Objective: Improve automobile access

Recommended Solutions:

- Design and construct a formal pick-up/drop-off (kiss-and-ride) location at the station.
- Pursue a parking agreement with the adjacent Christ the King Catholic Church for shared-use transit park-and-ride spaces.

Objective: Improve bicycle access

Recommended Solutions:

- Designate bicycle routes to station on Commercial Street and 30th Street.
- Sign bicycle routes.
- Add bicycle channel on stairs between station and Imperial Avenue.
- Add bicycle storage lockers at the station.

Objective: Improve station amenities

Recommended Solutions:

- Implement station upgrades to enhance station environment, including new platform, paving on tracks, shelters, and real-time signs.
- Add wayfinding signage to station from Imperial Avenue, 32nd Street, and Commercial Street.

Objective: Improve personal safety

Recommended Solutions:

- Improve lighting along stairway and under LRT bridge over Imperial Avenue.
- Enhance streetlights approaching station on Commercial Street, Imperial Street, Webster Street, and 32nd Street.
- To improve visibility and sense of security, eliminate or trim hedge on north side of station adjacent to the Christ the King Catholic Church.

- Seek community partners, including the Christ the King Catholic Church, to create a neighborhood watch program.
- Work with property owner to improve visibility and safety for pedestrians by removing slats from chain-link fence on Commercial Street south of the station.

Physical Solutions Implementation

To implement the physical improvements in the 32nd & Commercial Station area, SANDAG should:

- Incorporate the physical solutions into appropriate regional plans and capital improvement programs including the SANDAG Regional Transportation Plan, Regional Comprehensive Plan, Transportation Improvement Program, Orange Line rehabilitation project, and SANDAG Bicycle Master Plan.
- Work with the City of San Diego to incorporate the recommended physical solutions into local community plans and capital improvement programs.

7 First Mile and Last Mile Strategy and Implementation Guide

7.1 Purpose of this Guide

Closing the gap between the first or last mile of an employee's transit trip is an important part of making transit a viable alternative to driving. This section constitutes a guide that presents potential solutions, partnership options and implementation steps for SANDAG to undertake to engage and secure employers as partners in creating and implementing end-of-trip solutions to connect workers from nearby transit stops to their places of work. The guide was prepared specifically to focus on solutions and public-private partnerships that would help close the first mile/last mile gap between the Kearny Mesa Transit Center and surrounding major employers. Building upon the new I-15 Bus Rapid Transit (BRT) route scheduled to begin serving the Kearny Mesa Transit Center in 2013, employer sponsored connections between the Kearny Mesa Transit Center and employment sites affords an important opportunity to improve transit use and connectivity in this area.

7.2 Program Background

In 2010/2011, SANDAG conducted a study to identify a pilot project that would demonstrate a first or last mile solution to a transit station (The First and Last Mile Solutions for Transit Stations study). The identified pilot project(s) would close the "first mile/last mile" gap in transit service – the first mile between home and the transit station or the last mile between the transit station the destination. Access to and from the transit station is often the largest impediment to transit use for many potential transit riders. SANDAG selected two stations for this study, the 32nd Street Trolley Station and the Kearny Mesa Transit Center. Because the study focused on commute trips, these stations were selected for their proximity to residential first mile trips (32nd Street) and employment related last mile trips (Kearny Mesa).

To gauge public opinion about potential first and last mile solutions, SANDAG sought input from community groups, residents, employers, employees and transit riders around each station. Outreach efforts consisted of station intercept and web-based surveys, as well as interviews and meetings with select individuals. Based on public input received and technical study, SANDAG identified a number of physical improvements to enhance access to the two stations.

For the Kearny Mesa Transit Center, the overwhelming opinion from both transit riders and employees who don't currently ride transit is that a shuttle service or similar kind of motorized access would be the most helpful improvement to bridge the last mile gap between the transit station and their places of employment. For this reason, SANDAG selected the Kearny Mesa Transit Center as the focus of an approach for implementing motorized solution pilot project(s).

7.3 Program Objectives

SANDAG established several key objectives for the first and last mile pilot project:

- It should focus on commute (work) trips.
- It should focus on programmatic solutions.
- It should identify easy to implement capital improvements.
- It should seek private sector partnerships to share costs.
- It should be consistent with existing land uses.
- It should reflect stakeholder input and needs.

Because project resources are limited and implementing a publicly operated and subsidized shuttle or motorized transportation program does not meet project objectives to require little or no ongoing public operating subsidy, this *Strategy and Guide for Engaging Employers in Transit Solutions* has been prepared to pursue public-private partnerships for implementation of a shuttle or motorized transportation pilot project. The purpose of this strategy is provide a framework for employer support for a pilot project and guidance to SANDAG to work with employers in the Kearny Mesa area to develop a potential public-private transportation solution for closing the last mile gap between the Kearny Mesa Transit Center and places of employment, thus encouraging more employees to take transit.

7.4 Opportunities and Benefits

Providing gap closure transit improvements to and from the Kearny Mesa Transit Center presents a number of opportunities and benefits for SANDAG, employers in the area, and employees.

- The I-15 BRT line will begin service in 2013 and will stop at the Kearny Mesa Transit Center. This new service will operate between Escondido and downtown San Diego via Mid-City all day in both directions, every 15 minutes during peak periods and every 30 minutes in the midday and evenings (see Figure 9). It will travel on the I-15 Managed Lanes (express lanes) serving six transit centers along the route, including the Kearny Mesa Transit Center, connecting employee residential areas with the Kearny Mesa job center. Because BRT service will be significantly faster than local bus service, transit will become a more viable transportation choice for a larger number of commuters.

- Construction on the new County Operations Center in Kearny Mesa is underway and will be complete in 2014. The County is currently operating a shuttle for employees between downtown San Diego and Kearny Mesa. With the participation of SANDAG and other Kearny Mesa employers, there may be opportunities to partner with the County and expand shuttle service to include the Kearny Mesa Transit Center and other major employers in the area.
- Having an operational motorized last mile connection in place from the Kearny Mesa Transit Center will encourage greater transit ridership and help support regional mobility and sustainability programs and goals.
- Implementation of a viable last mile solution at the Kearny Mesa Transit Center will allow employers to promote transit use and offer incentives for their employees to take transit. Convenient transit options will expand the pool of potential employees for Kearny Mesa area employers to include those who don't have a car available for their commute trip, reduce commuting stress for employees so that they arrive to work in a positive and productive state of mind, and provide opportunities for employers to be corporate leaders in promoting environmental stewardship and sustainability through support for alternative travel modes by their employees.

7.5 Strategic Framework for Engaging Employers

For a shuttle service or other kinds of motorized last mile solutions (i.e., carpools) to be successful, SANDAG will need the active participation of key employers in the Kearny Mesa area through a public-private partnership. Not only will key employers be needed to buy-in to the concept and agree to participate, but these employers will also need to take a leadership role in attracting additional employers to the table to support and help fund the solutions. Following are six strategic activities that SANDAG should undertake to successfully engage the Kearny Mesa area employers in discussions, generate an understanding of the need for a last mile solution, and garner support from employers to become an active partner in implementing last mile solutions in coordination with SANDAG:

Complete Research and Preparation

Before initiating contact with employers, SANDAG staff should:

- **Identify key employers and a contact person for each employer** – Large, medium-size, and high-profile employers should be the target of initial contact as they have the greatest potential to benefit from a last mile solution and are more likely have the resources to support a last mile solution. The initial outreach process will be facilitated by having a specific person to contact for each employer versus making cold calls. Table 8 provides an initial list of key Kearny Mesa area employers and trade associations as of July 2011. The names, positions, and contact information for individuals at each employer is on file at SANDAG.

Figure 9: Planned I-15 BRT Service to Kearny Mesa Transit Center

- **Develop an initial contact presentation and marketing script** – The I-15 BRT scheduled to begin service to the Kearny Mesa Transit Center in 2013 can be promoted to employers as a benefit that expands their ability to attract employees, and can be identified as a catalyst for implementing a last mile solution. SANDAG should craft the message, prepare a presentation outline and/or script (both for the initial phone or email contact and the first face-to-face meeting), and develop leave behind materials that market the new BRT, explain the last mile goals, benefits, and partnership objectives, and provide a description of potential last mile solutions. Motorized solution descriptions and examples are provided in the October 2011 *First and Last Mile Solutions for Transit Centers* report and in this *Strategy and Guide*.
- **Assess the level of support SANDAG may be willing to provide for each potential solution** – The partnership concept for a last mile solution requires that SANDAG participate at some defined level. SANDAG staff will need to have an idea of how SANDAG would or could participate and provide support, and what might be expected of employers. SANDAG support can be in-kind staff support to define the details of the solution, provide administrative start-up assistance, maintain an employee outreach and marketing program, administer a Transportation Management Association or other employer consortium, and/or provide ongoing program and/or service management and monitoring. SANDAG can also provide one-time capital funding for vehicles, signage, or other facilities, and/or ongoing operating funding to support operating costs, marketing and administrative expenses, vehicle leases, or insurance.

Identify a Political Champion

To help SANDAG make inroads with employers and get commitments to participate in developing a last mile solution, an elected official champion and prominent business leaders should be recruited to work with SANDAG staff and employers. The champion should be from the SANDAG Board or Transportation Committee, and preferably someone who can help identify and persuade prominent business leaders from the Kearny Mesa area to step forward in support of the last mile solution partnership program. The champion would be asked to head an Employers Transit Task Force and along with the identified business leaders could speak publicly about the project and convey its benefits to the business community and general public.

Conduct One-on-One Meetings with Key Employers

SANDAG should conduct one-on-one meetings with the key employers to present the program goals, benefits, potential last mile solutions, and partnership proposals. These initial meetings should be high level and conducted with the elected official champion and the CEO of the identified employers, with support from SANDAG staff. The intent of these meetings is to gain buy-in on the idea that increased transit access is beneficial to both employers in the area and their employees, and obtain an initial commitment from employers that they will participate in next steps toward developing a public-private partnership motorized solution to bridge the last mile between the Kearny Mesa Transit Center and their employment site.

Depending on the employer, next steps may be participating in an employers' task force as described below or continuing to work with SANDAG toward an individual solution. SANDAG may need to follow two potential paths simultaneously, as shown in Figure 10.

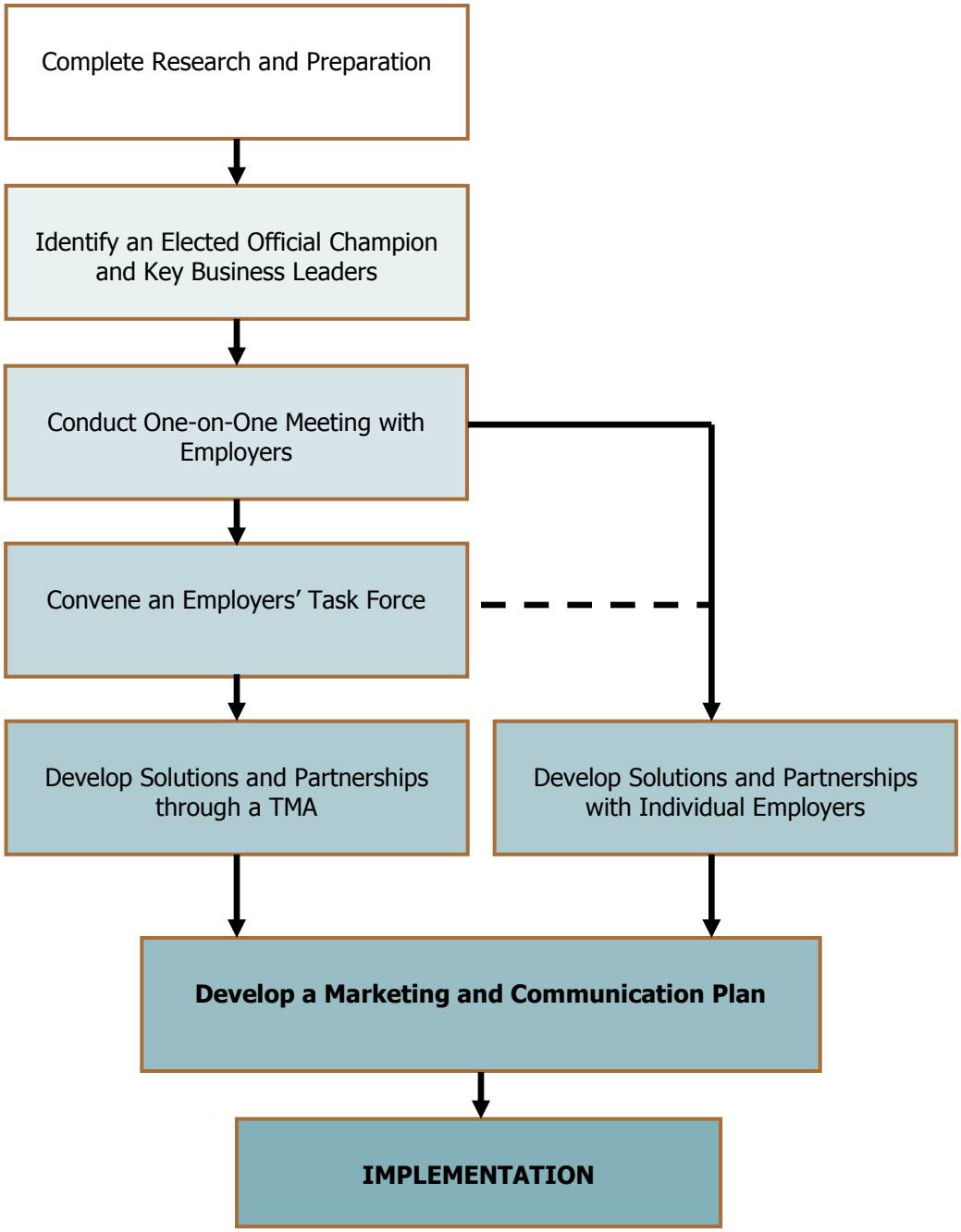
Table 8: Kearny Mesa Transit Center Area Employers/Stakeholders

CATEGORY	STAKEHOLDER	ADDRESS
Accessibility Challenged	Access to Independence	8885 Rio San Diego Drive, #131, San Diego 92108
	Mayor's Committee on Disability	1200 Third Ave. Suite 1300 MS 56C, San Diego 92101
	SANDAG Social Services Technical Advisory Committee	401 B Street, Suite 800, San Diego 92101
Business groups	Industrial Environmental Association (trade association with many Kearny Mesa business members)	701 B Street, Suite 1040, San Diego 92101
Car dealerships	BMW of San Diego	5090 Kearny Mesa Road, San Diego 92111
	CarMax Kearny Mesa	7766 Balboa Avenue, San Diego 92111
	Kearny Mesa Infiniti	4670 Convoy Street, San Diego 92111
	Kearny Mesa Toyota	4910 Kearny Mesa Road, San Diego 92111
	Mercedes Benz of San Diego	4750 Kearny Mesa Road, San Diego 92111
	Pacific Honda	4761 Convoy Street, San Diego 92111
	San Diego Volvo	5350 Kearny Mesa Road, San Diego 92111
Community Planning Group	Kearny Mesa Planning Group	8906 Aero Drive, San Diego 92123
Employers	Bridgepoint Education	8620 Spectrum Center Blvd., San Diego 92123
	Channel 51/KUSI	4575 Viewridge Avenue, San Diego 92123
	City of San Diego Environmental Services Dept.	9601 Ridgehaven Court, San Diego 92123
	County of San Diego (in their role as employer)	5201 Ruffin Road, San Diego 92123
	Cox Communications	5651 Copley Drive, San Diego 92111
	Cubic Corp.	9333 Balboa Avenue, San Diego 92123
	Hamilton Sundstrand	4400 Ruffin Road, San Diego 92123
	Jack in the Box	9330 Balboa Ave., San Diego 92123
Employers (continued)	Kaiser Permanente San Diego	4647 Zion Ave., San Diego 92120
	Kaplan College	9055 Balboa Avenue, San Diego 92123
	Kyocera San Diego	8611 Balboa Ave., San Diego 92123
	L-3 Communications	9020 Balboa Ave, San Diego 92123
	Leap Wireless/Cricket Communications	5887 Copley Drive, San Diego 92111
	Northrup Grumman	9326 Spectrum Center Blvd., San Diego 92123
	Raytheon Integrated Defense Systems	8680 Balboa Avenue, San Diego 92123
	San Diego County Sheriff's Department (in their role as employer)	9621 Ridgehaven Court, San Diego 92123
	SDG&E	8326 Century Park Court, San Diego 92123
	Sharp Healthcare	8695 Spectrum Ctr Blvd, San Diego 92123
	Solar Turbines	4200 Ruffin Road, San Diego 92123
	Stu Segall Productions	4705 Ruffin Road, San Diego 92123
Hotels	Courtyard San Diego Central	8651 Spectrum Center Blvd., San Diego 92123
	Extended Stay America	3860 Murphy Canyon Road, San Diego 92123
	Hampton Inn San Diego-Kearny Mesa	5434 Kearny Mesa Road, San Diego 92123
	Holiday Inn San Diego-Mission Valley	3805 Murphy Canyon Road, San Diego 92123
Non-profits	American Red Cross San Diego-Imperial Chapter	3950 Calle Fortunada, San Diego 92123
	California Center for Sustainable Energy	8690 Balboa Avenue Suite 100, San Diego 92123
	Toby Wells YMCA	5105 Overland Avenue, San Diego 92123
Public facilities	Mike Tussey, City of SD Airports Div.	3750 John J. Montgomery Drive, San Diego 92123

Table 8: Kearny Mesa Transit Center Area Employers/Stakeholders (continued)

CATEGORY	STAKEHOLDER	ADDRESS
Residential communities	Avion Apartments (Spectrum Center)	8811 Spectrum Center Blvd., San Diego 92123
	Boardwalk Condos HOA (Spectrum Center)	8995 Spectrum Center Blvd., San Diego 92123
	Esplanade Condos HOA (Spectrum Center)	8842 Spectrum Center Blvd., San Diego 92123
	Kearny Mesa Lodge Mobile Home Park	6460 Convoy Court, San Diego 92117
	Promenade Condos HOA (Spectrum Center)	Spectrum Center, San Diego 92123
	Tribeca Condos HOA (Spectrum Center)	Spectrum Center, San Diego 92123
Schools	Coleman College	8888 Balboa Avenue, San Diego 92123
	National University Law School	9388 Lightwave Avenue, San Diego 92123
	University of Phoenix	3890 Murphy Canyon Road, San Diego 92123
Shopping Centers	Target Shopping Center (Convoy)	8001 Othello Ave, San Diego 92111
	Vista Balboa Center (Albertson's)	7725 Balboa Avenue, San Diego 92111
Transportation & Bicycle Advocates	Move San Diego	P.O. Box 87588, San Diego 92138
	San Diego County Bicycle Coalition	P.O. Box 34544, San Diego 92163
	Walk San Diego	740 13th Street, Suite 502, San Diego 92101

Figure 10: Strategic Framework Approach



Convene an Employers Transit Task Force

Building off positive results from the one-on-one meetings with key employers and other contacts and presentations made by the elected official champion, business leaders and SANDAG staff, SANDAG should consider convening an Employers Transit Task Force to actively engage a broader coalition of employers in the program goals and development of last mile solutions. This task could work with SANDAG to identify viable solutions and possibly develop a multi-employer partnership (such as a Transportation Management Association) to provide a coordinated last mile solution for more than one employer. The task force should have a clear goal and timeline so that a plan can be implemented in a reasonable period of time—preferably targeted to the initiation of the new I-15 BRT service to the Kearny Mesa Transit Center in 2013.

Develop a Last Mile Motorized Solution Implementation Plan

Based on input from the Employers Transit Task Force and/or individual employers, and technical information from SANDAG staff and consultants, develop an implementation plan and timeline for a last mile motorized solution. The implementation plan should include the following:

1. Parameters
2. Procedures
3. Responsibilities of SANDAG and employer partners
4. Costs (capital, operation and maintenance)
5. Monitoring Program/Success factors
6. Marketing and Communications Strategy to promote the new service to employees

Items 1, 2, 3, and 4 are addressed in Section 7.6, Last Mile Solutions and Partnership Implementation Options. Item 5 should be established through agreement between SANDAG and the employers. Item 6 is discussed below.

Develop a Marketing and Communications Plan

SANDAG should develop a plan to promote transit to the employees in the Kearny Mesa area. The beginning of BRT service to the Kearny Mesa Transit Center in 2013 presents an opportunity to significantly increase transit ridership among employees in the area. The purpose of a marketing and communications strategy is to promote BRT service, paired with the selected last mile solution, to employees as a viable alternative to commuting by car. The marketing and communications plan should include a stakeholders' analysis, key messages to communicate information about the new service, measurable objectives, and a list of coordinated strategies and tactics to draw from to promote the new service among employees. Strategies and tactics may include:

- Developing materials to provide information to employees about the benefits of using transit to get to work.
- Hosting a "kick-off" event to launch the new service. This event should include fun activities for employees such as contests to win annual transit passes, interactive booths to provide information about transit and the new service, free promotional items, food and music.
- Engaging in media relations to promote coverage of the launch of the new service in print, broadcast and online media.
- Providing materials to help employers promote the new service among their employees. These materials may include brochures, schedules, content for company newsletters, and ideas for incentives to encourage employees to take transit.

- Making presentations to employee groups.
- Coordinating annual events or contests to coincide with events such as Rideshare Week and Earth Day.
- Providing information related to employer and employee commuter tax benefits. As of September 2011, employers may give their employees up to $230/month to commute via transit, vanpool, or carpool. The employer gets a tax deduction which results in savings over providing the same value in gross income. Employers may also allow employees to use pre-tax income to pay for transit, vanpooling or carpooling and employers save on payroll tax.[4]

Implementation

Implementing the strategic framework actions and tactics identified above will help establish a strong foundation of commitment for identifying and implementing a motorized last mile solution in the Kearny Mesa area. This commitment, combined with the introduction of the faster, more direct BRT transit service in 2013 presents a unique opportunity to launch a complete transit solution that can serve the transportation needs of many area employees. The next section discusses potential implementation activities.

7.6 Last Mile Solutions and Partnership Implementation Options

To move the employer partnerships toward last mile solution implementation, SANDAG will need to identify a menu of feasible alternatives for consideration, along with the potential roles and responsibilities for implementation. This section provides a selection of motorized solution options and identifies actions that would be necessary to implement these prospective motorized solutions, along with a corresponding menu of potential SANDAG and employer roles and responsibilities that can be drawn from to create implementation partnerships.

Shuttles

Shuttles provide regularly scheduled connections for transit users between transit stops and their origins/destinations. They require initial capital costs and ongoing operational costs, but offer consistent, reliable service. Furthermore, shuttles can be owned and operated by private employers, either individually or through a consortium. The generally estimated annual cost associated with operating a single bus shuttle operating 6 hours a day for 250 days a year is $125,000. There may be grant monies available to employers or consortiums of employers to help defray some of the costs. In particular, air quality management agencies will often step forward to provide funding.

Three potential shuttle routes connecting the Kearny Mesa Transit Center with employers in the area were developed to provide initial concepts for a last mile shuttle solution. Each shuttle route concept focuses on a different geographic area and different employers in Kearny Mesa (see Figure 11). Each shuttle route concept is described below with information on route length, travel time, service frequency, number of vehicles required, and estimated annual operating cost. SANDAG can use these shuttle concepts as a starting point for discussions with employers and for developing details of more specific shuttle solutions.

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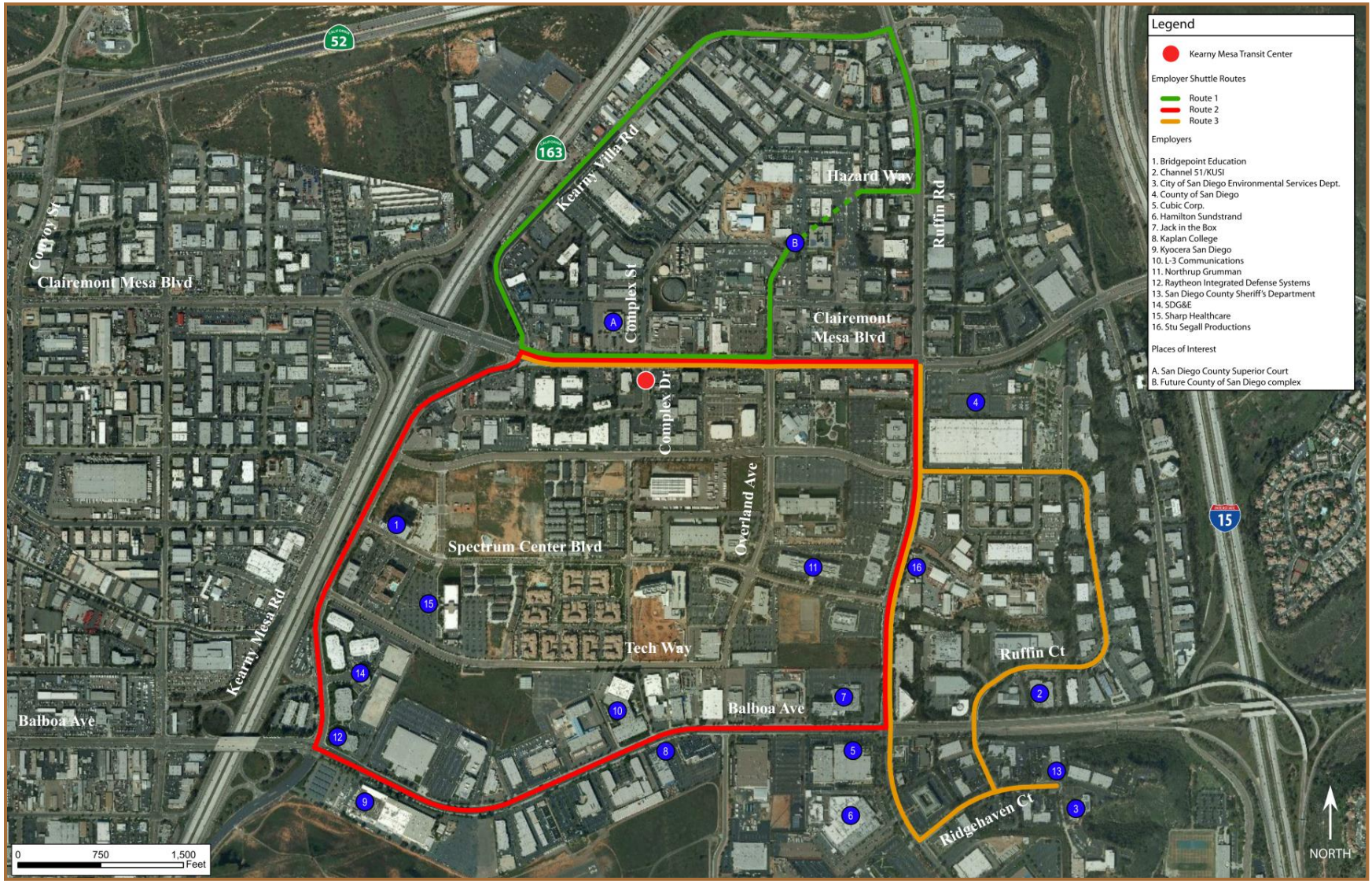
[4] Commuter Tax Benefits. Section 132(f) of the Internal Revenue Code. (http://www.nctr.usf.edu/programs/clearinghouse/commutebenefits/)

Figure 11: Kearny Mesa Transit Center Shuttle Routes



Northern San Diego County Complex – Route 1

Route 1 provides shuttle service to the northern portion of the Kearny Mesa area in a one-way loop and serves the new County of San Diego complex and smaller employers located on Kearny Villa Road and Ruffin Road.

- Route Length: 2.2 miles
- Travel Time: 11 minutes (assumed 12 mph average speed)
- Frequency: 15 minute headways
- Vehicles Required: 1
- Annual Service Hours: 1,500
- Annual Estimated Operating Cost[5]: $120,000

Southern Balboa Avenue - Route 2

Route 2 provides shuttle service to the southern portion of the Kearny Mesa area in a one-way loop and connects to more than a half dozen major employers on Kearny Villa, Balboa Avenue, and Ruffin Road.

- Route Length: 3.2 miles
- Travel Time: 15 minutes (assumed 13 mph average speed)
- Frequency: 15 minute headways
- Vehicles Required: 1
- Annual Service Hours: 1,500
- Annual Estimated Operating Cost[6]: $120,000

Southeastern - Route 3

Route 3 provides shuttle service to the southeast portion of the Kearny Mesa area in a one-way loop serving employers on Ridgehaven Court and Ruffin Court.

- Route Length: 4.3 miles
- Travel Time: 20 minutes (assumed 13 mph average speed)
- Frequency: 10-15 minute headways
- Vehicles Required: 2
- Annual Service Hours: 3,000
- Annual Estimated Operating Cost[7]: $240,000

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5 Cost assumptions for the routes are based operation 6 hours per day (a three-hour morning and evening peak period), 250 days per year. Per hour cost is $80 based on similar sized shuttle for UCSF in San Francisco.

6 Ibid.

7 Ibid.

Route Considerations

- Adequate bus service exists on Ruffin and Balboa for supplemental midday service.
- Route 1 assumes access through the County of San Diego complex internal circulation roads. Access restrictions may require special dispensation for access for this route.
- Planned frequencies for the new I-15 BRT service to Kearny Mesa Transit Center are 15 minute in both directions; therefore, 15 minute frequencies on shuttle routes will only provide a timed transfer to the BRT in one direction.
- Depending on the travel direction of the shuttles, some BRT passengers would need to cross Clairemont Mesa Boulevard to reach the shuttle stop.

Partnerships and Implementation Roles: Single Employer Operated Shuttle

Operated by a single employer, an employer-operated shuttle, vanpool or carpool program would provide transportation services in a particular area for one primary employer. SANDAG and employer responsibilities may include:

- SANDAG:
  - Manage program setup, including providing information/marketing materials for employers to share with employees.
  - Provide information on prospective shuttle contractors, related requirements, performance criteria, cost evaluation, and contracting support.
  - Support route and schedule development.
  - Design and construct a formal pick-up/drop-off location at the Kearny Mesa Transit Center.
  - Provide capital funding for vehicles, signage, and other capital needs.
  - Assist with seeking funding for vehicle lease payments.
  - Assist with ongoing monitoring of shuttle use and suggest modification proposals, if necessary.
- Employer:
  - Provide a staff manager for shuttle service and employee marketing.
  - Promote regional transit service available at the Kearny Mesa Transit Center and the last mile shuttle service to employees.
  - Contract with shuttle operator for operations and maintenance / Provide own operating and maintenance staff.
  - Ensure appropriate insurance and liability coverage for the service is provided.
  - Provide the shuttle vehicle(s) (own or lease).
  - Assume responsibility for all operating and maintenance costs.

Partnerships and Implementation Roles: Transportation Management Association (TMA)

TMAs are non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district or industrial park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. Support from SANDAG may include program setup, capital funding, and driver/passenger coordination assistance. TMAs typically hire private transit companies to operate the service, who carry their own insurance.

SANDAG and employer responsibilities for establishing a TMA to provide and oversee shuttle service may include:

- SANDAG:
  - Manage program setup, including providing information/marketing materials for employers to share with employees.
  - Provide information on prospective shuttle contractors, related requirements, performance criteria, cost evaluation, and contracting support.
  - Support route and schedule development.
  - Design and construct a formal pick-up/drop-off location at the Kearny Mesa Transit Center.
  - Assist with identifying capital funding for vehicles, signage, and other capital needs.
  - Assist with identifying sources of funds to help cover operating and maintenance costs.
  - Assist with ongoing monitoring of shuttle use and suggest modification proposals, if necessary.
- Employers:
  - Provide a staff representative to sit on the board of the TMA or provide input on TMA activities.
  - Promote regional transit service available at the Kearny Mesa Transit Center and the last mile shuttle service to employees.
  - Contract with shuttle operator for operations and maintenance.
  - Ensure appropriate insurance and liability coverage for the service is provided.
  - Provide the shuttle vehicle(s).
  - Contribute funds to the TMA for operating and maintenance costs.

Transportation Management Association Examples

Emery-Go-Round - The Emery-Go-Round TMA in Emeryville and Oakland runs a free shuttle service connecting the MacArthur BART Station with residences, businesses and shopping in Emeryville. It is funded by commercial property owners within the citywide transportation business improvement district and is run by the TMA's board of directors. The Emery-Go-Round provides three routes—Hollis, Shellmound/Powell, and Watergate Express—each with different weekend, weekday and evening service described below. The fleet includes 14 shuttle vehicles and one van and has an annual ridership of 1.3 million. The annual operating budget for this extensive shuttle program is approximately $2.4 million (http://www.emerygoround.com/about-us).

Emery-Go-Round Shuttle Service

	Hollis	Shellmound/Powell	Watergate Express
Frequency	10 min (peak) 20 min (midday)	15 min	15 min
Hours of Operation	**Weekday:** 5:45 a.m. – 10:15 p.m.	**Weekday:** 5:47 a.m. – 10:30 p.m. **Saturday:** 9:20 a.m. – 10:36 p.m. **Sunday:** 10:00 a.m. – 7:20 p.m.	**Weekday AM:** 7:10 – 10:03 a.m. **Weekday PM:** 3:15 – 7:06 p.m.
Route Distance	6.5 miles	7.2 miles	5.8 miles

Bishop Ranch Business Park - Bishop Ranch Business Park in San Ramon California has a TMA with several transportation demand management programs, including a shuttle connecting Bishop Ranch to BART. Using a fleet of 10 vehicles, the TMA operates five shuttles connecting to Dublin/Pleasanton BART Station, Walnut Creek BART Station, San Ramon Transit Center, Pleasanton ACE, and Mitchell Park and Ride Lot. The characteristics of each route are described below.

Incentive programs to encourage employees to take BART to one of these stations and complete their trip to Bishop Ranch Business Park by shuttle include the following:

- Guaranteed Ride Home Incentive – Provides a free ride home via taxi or rental car up to six times each year if you carpool, vanpool, bike, walk or ride transit to work.
- ACE Train Incentives – Provides one month of free rides on the ACE train to qualified new riders who work in San Ramon and 50 percent off the second monthly pass for new riders.
- Vanpool Incentive – Receive a 50 percent rebate on your vanpool fare for the first six months (for new passengers).
- Vanpool Driver/Coordinator Incentive – New drivers or coordinators who form a new vanpool receive a $1,000 check after one year of operation.
- TriDelta Express Incentive – Provides buy one month, get the second one free on the TriDelta Express Bus service.
- Free County Connection Bus Pass – Provides a free bus pass for all express and local County Connection bus routes.

Bishop Ranch Business Park Shuttle Service

	96X: Walnut Creek BART Station	**97X: Dublin/ Pleasanton BART Station**	**95X: San Ramon Transit Center to Walnut Creek BART**	**92X ACE Express: Pleasanton ACE Train Station**	**92X Mitchell Park and Ride**
Frequency	10 to 20 min	30 min	40 min	60 min	60 min
Hours of Operation	**Weekday AM:** 5:35– 7:15 a.m. **Weekday PM:** 12:30 – 7:50 p.m.	**Weekday AM:** 6:30 – 9:30 a.m. **Weekday PM:** 3:55 – 7:00 p.m.	**Weekday AM:** 6:30 – 9:04 a.m. **Weekday PM:** 4:00 – 7:15 p.m.	**Weekday AM:** 5:35 – 8:24 a.m. **Weekday PM:** 3:40 – 7:45 p.m.	**Weekday AM:** 5:45 – 7:15 a.m. **Weekday PM:** 4:35 – 7:20 p.m.
Route Distance	24 miles (round trip)	20 miles (round trip)	24 miles (round trip)	12 miles (one way)	18 miles (one way)

Oyster Point Commuter Shuttle – The San Francisco-Oyster Point Commuter Shuttle operates Monday through Friday during commute hours between the South San Francisco BART Station and the Oyster Point Business Park. This shuttle is operated by the Peninsula Congestion Relief Alliance, which is San Mateo County's Transportation Demand Management Agency whose mission is to reduce the number of single-occupancy vehicles in the county. The shuttle is 75 percent funded by operating grants from the Bay Area Air Quality Management District, local Metropolitan Planning Organization (City/County Association of Governments), and the San Mateo County Transit District. The remaining 25 percent of

funding is provided by nine participating employers in the Oyster Point Business Park. Each employer pays its portion based on the number of employees. The fleet includes 2 shuttles and has an annual ridership of more than 28,000.

Oyster Point Commuter Shuttle Service

Frequency	Coincides with BART schedule, leave/arrive at BART station about every 30 minutes
Hours of Operation	Weekday: 6:40 a.m. to 10:02 a.m. and 3:47 p.m. to 6:36 p.m.
Route Distance	5.5 miles (one way)

Carpools

Automobiles (or vans) owned by employers may be used for carpools to transport transit users between transit stops and their destinations. SANDAG and employers may partner to implement a program to connect drivers and riders with similar destinations and schedules.

The carpool would take employees from the transit station to the employment site in the mornings and back in the evenings. Cars may be parked at the employment site during the day and at a designated parking spot at the transit station overnight.

Partnerships and Implementation Roles

SANDAG and employer responsibilities for establishing a carpool program to provide and oversee shuttle service may include:

- SANDAG:
  - Manage program setup, including providing information/marketing materials for employers to share with employees.
  - Provide ongoing staff support to establish and maintain a ride-matching database for employers.
  - Provide information on appropriate vehicles and driver responsibilities.
  - Coordinate with local jurisdictions and or private property owners to identify overnight parking for the vehicles adjacent to transit station.
  - Assist with identifying capital funding for vehicles, signage, and other capital needs.
  - Assist with ongoing monitoring of carpooling and vanpooling activities and suggest program modifications, as appropriate.
- Employers:
  - Provide a staff representative to coordinate carpooling activities and distribute information to employees.
  - Purchase, maintain, and insure automobiles for carpooling.
  - Provide priority daytime parking for carpool vehicles at employment site.

Coordinated Carpools

Another option for carpooling involves privately owned vehicles used for carpooling from the transit station to businesses in the area. SANDAG and employers would partner to implement a program to connect willing employee drivers with transit-riding co-workers and coordinate pick-up and delivery schedules. Drivers would stop at the transit center on their way to work in the mornings to pick up

designated passengers to continue to the work site, and make the reverse trip on their way home in the evenings. To encourage drivers to participate, SANDAG and employers may need to offer incentives to conduct the carpool.

Partnerships and Implementation Roles

SANDAG and employer responsibilities for establishing a carpool program to provide and oversee shuttle service may include the following.

- SANDAG:
  - Manage program setup, including providing information/marketing materials for employers to share with employees.
  - Provide ongoing staff support to establish and maintain a ride-matching database for employers.
  - Provide information on appropriate vehicles and driver responsibilities.
  - Assist with ongoing monitoring of carpooling and vanpooling activities and suggest program modifications, as appropriate.
- Employers:
  - Provide a staff representative to coordinate carpooling activities and distribute information to employees.
  - Provide incentives to employees who carpool.
  - Provide priority daytime parking for carpool vehicles at employment site.

Next Step

There are several last mile solutions to pursue with employer partners and multiple permutations of partnership roles and responsibilities that could be created to implement these solutions in the Kearny Mesa area. The next step would be for SANDAG to undertake the steps identified in Figure 10 to engage Kearny Mesa area employers in pursuing and implementing the solutions.

Appendix A

Narrowed Set of Stations Evaluation

			Population (1)				Employment (2)				Access (3)							
	Narrowed Stations	Station ID	Population Density Population/Acre within 2 miles of station	Population Demographics Employed Population (employees/acre) within 2 miles of station[4]	Population Demographics Percent of Household Auto Ownership within 2 miles of station*	Population Summary Evaluation (A+B+C)	Employment Density Employees/ Acre within 2 miles of station	Major Employers (50+) within 1 mile of station	Major Employers (50+) within 3 miles of station	Employment Summary Evaluation (E+F+G)	Motorized Access Options feeder bus (F), park & ride (P), and None (N)	Pedestrian Access[5] # intersections (including alleys) within 1/2 mile of station	Bike Access[6] linear mileage (total) of bike routes (classes I, II, III, IV) within 2 mile of station	Transit Ridership # of transit riders in both the AM and PM peaks combined	Access Summary Evaluation (I+J+K+L)	Total Summary (D+H+M) Higher = Better	Order Rank All Stations (1 = Highest)	Rank by Line/Route (1 = Highest)
Sprinter Line	Coast Hwy Station	27001	12.9	94%	88%	3	5.1	15	124	1	P	191	11.7	87	5	9	15	2
	Sprinter Crouch St Station	27002	10.1	94%	89%	3	4.3	20	130	0	P	63	26.6	186	5	8	22	4
	El Camino Real Station Parking Lot	27003	7.1	95%	94%	2	3.9	6	168	1	P	43	32.7	147	5	8	22	4
	Rancho Del Oro Station	27004	8.3	95%	95%	2	4.4	5	149	0	P	29	33.2	89	5	7	35	11
	College Blvd Station	27005	9.7	95%	95%	2	4.1	26	155	1	P	61	31.8	194	4	7	35	11
	Melrose Station	27006	13.4	94%	93%	3	3.8	19	123	0	P	53	22.4	122	5	8	22	4
	Escondido Ave Station	27008	14.1	94%	94%	3	3.7	17	126	0	P	79	16.7	154	5	8	22	4
	Buena Creek Station	27009	7.5	94%	96%	1	2.6	19	183	1	P	73	11.8	126	6	8	22	4
	Palomar College Station	27010	7.6	94%	93%	2	5.6	43	197	2	FP	29	31.5	377	4	8	22	4
	San Marcos Civic Center Station	27011	7.0	94%	95%	2	5.5	41	147	1	N	79	36.5	165	5	8	22	4
	Cal State San Marcos Station	27012	6.4	94%	94%	2	5.1	36	170	2	N	64	32.8	67	5	9	15	2
	Nordahl Rd Station	27013	6.5	94%	91%	2	5.9	49	205	2	P	47	21.1	68	6	10	11	1
Coaster Line	Carlsbad Village Station	28001	10.1	96%	92%	4	4.2	21	129	0	FP	117	14.7	321	4	8	22	1
	Carlsbad Poinsettia Station	28002	4.9	97%	96%	2	4.7	13	144	0	FP	49	21.9	315	5	7	35	2
	Encinitas Station	28003	8.5	97%	95%	3	4.6	35	98	0	FP	121	14.7	336	4	7	35	2
	Solana Beach Station	28004	4.7	97%	96%	2	3.5	22	72	0	FP	66	12.3	124	5	7	35	2
San Diego Trolley Blue Line	Beyer Blvd Station	75003	14.0	91%	87%	3	3.0	14	74	0	FP	94	13.1	617	4	7	35	4
	Palm Avenue Station	75006	13.8	92%	89%	3	3.4	24	138	0	FP	57	13.2	1087	3	6	44	6
	Palomar Street Station	75008	12.1	93%	88%	3	4.4	32	167	1	FP	73	12.1	1972	3	7	35	4
	H Street Station	75010	10.1	92%	85%	4	5.3	35	195	2	FP	96	8.4	1299	3	9	15	2
	Bayfront/E Street Station	75012	10.8	92%	84%	4	5.8	34	189	2	FP	107	8.7	1074	2	8	22	3
	24th Street Station	75014	15.9	93%	81%	4	8.5	53	210	3	FP	130	6.1	988	3	10	11	1
San Diego Trolley Green Line	Santee Town Center Station	75020	8.0	96%	96%	2	4.7	34	145	0	FP	38	21.4	402	5	7	35	14
	Gillespie Field Station[7]	75022	7.3	96%	94%	1	6.1	40	195	2	P	22	21.5	309	6	9	15	11
	Arnele Avenue Station[7]	75024	15.5	93%	89%	3	7.0	68	226	3	FP	48	17.3	408	5	11	9	7
	Amaya Drive Station[7]	75029	11.4	96%	92%	4	5.2	31	223	2	FP	60	20.5	482	4	10	11	9
	Grossmont Transit Center[7]	75030	11.0	96%	92%	4	4.6	44	189	1	FP	49	21.3	1098	3	8	22	12
	70th St Station	75032	15.9	92%	92%	3	5.7	31	233	2	FP	143	16.6	187	3	8	22	12
	Morena/Linda Vista Station	75044	9.2	95%	93%	2	9.1	59	366	4	FP	81	24.2	284	4	10	11	9
	Hazard Center Station	75048	20.1	95%	88%	4	13.2	122	441	6	N	34	26.8	305	7	17	1	1
	Mission Valley Center Station	75050	21.3	95%	87%	4	13.4	122	427	6	F	23	24.5	437	6	16	3	3
	Rio Vista Station	75053	21.2	95%	87%	4	12.5	117	440	6	N	20	24.4	218	7	17	1	1
	Fenton Parkway Station	75055	20.4	95%	89%	4	9.9	80	445	4	N	34	23.9	246	7	15	4	4
	Mission San Diego Station	75059	19.1	94%	90%	3	7.7	49	435	3	F	16	19.0	187	6	12	6	5
	Grantville Station	75060	20.1	91%	89%	4	7.0	37	330	3	FP	31	16.5	472	5	12	6	5
	Alvarado Station	75064	16.8	91%	92%	3	4.6	69	255	2	N	62	15.9	151	6	11	9	7
San Diego Trolley Orange Line	Spring Street Station	75036	13.1	94%	90%	3	5.1	24	177	2	FP	102	18.3	496	3	8	22	4
	Lemon Grove Depot	75038	14.0	94%	92%	3	3.5	24	180	1	FP	132	13.3	774	3	7	35	5
	Massachusetts Ave Station	75040	13.8	93%	93%	3	2.2	5	119	0	P	82	12.7	244	6	9	15	2
	Encanto/62nd St Station	75067	16.2	92%	91%	3	1.8	5	130	0	FP	114	7.6	723	3	6	44	6
	47th St Station	75070	19.7	90%	84%	3	3.2	26	189	1	P	104	6.9	295	5	9	15	2
	32nd St/Commercial Station	75073	25.5	91%	76%	5	9.0	41	449	3	F	179	8.2	523	4	12	6	1
I-15 BRT	Sabre Springs BRT Station	99426	7.4	96%	96%	2	2.6	18	115	0	FP	65	21.5	121	4	6	44	4
	Rancho Bernardo BRT Station	99433	7.4	96%	94%	3	5.1	37	130	1	FP	28	19.2	88	5	9	15	2
	Del Lago BRT Station	99434	2.8	96%	97%	2	1.0	12	44		FP	43	9.0	0			22	3
	Kearn Mesa Transit Center **	10538	4.1	96%	93%	3	16.8	164	397	6	F	50	16.8	523	4	13	5	1
			20.0+ 10.0-19.9 0-9.9 Range: 2.2-25.5	96%+ 91-95 85-90 Range: 89% - 97%	<85% 86-95% 96-100% Range: 76-98%		10.0+ 5.0-9.9 0-4.9 Range: 1.0-16.8	100+ 50-99 1-49 Range: 5-164	300+ 150-299 0-149 Range: 44-449		None One Both Range: None-Both	0-49 50-99 100+ Range: 9-191	0-14.9 15.0-29.9 30.0+ Range: 6.1-36.5	0-499 500-999 1000+ Range: 67-1972		10+ 5-9 0-4 Range: 2-14	Blue = Top 5	

			Population (1)				Employment (2)				Access (3)							
	Narrowed Stations	Station ID	Population Density	Population Demographics	Population Demographics	Population Summary Evaluation (A+B+C)	Employment Density	Major Employers (50+)	Major Employers (50+)	Employment Summary Evaluation (E+F+G)	Motorized Access Options	Pedestrian Access[5]	Bike Access[6]	Transit Ridership	Access Summary Evaluation (I+J+K+L)	Total Summary (D+H+M) Higher = Better	Order Rank All Stations (1 = Highest)	Rank by Line/Route (1 = Highest)
			Population/Acre within 2 miles of station	Employed Population (employees/acre) within 2 miles of station[4]	Percent of Household Auto Ownership within 2 miles of station*		Employees/ Acre within 2 miles of station	within 1 mile of station	within 3 miles of station		feeder bus (F), park & ride (P), and None (N)	# intersections (including alleys) within 1/2 mile of station	linear mileage (total) of bike routes (classes I, II, III, IV) within 2 mile of station	# of transit riders in both the AM and PM peaks combined				
		Ratings:																
		Best	higher densities	high % employed	low % auto ownership		higher densities	highest # employers	highest # employers		none	lowest # intersections	lowest # linear bike miles	Lowest # of passengers				
		Moderate	mid range densities	mid range % employed	mid % auto ownership		mid range densities	moderate # employers	moderate # employers		one mode	moderate # intersections	moderate # linear bike miles	Moderate # of passengers				
		Worst	low densities	low % employed	high % auto ownership		low densities	lowest # employers	lowest # employers		both modes	highest # intersections	highest # linear bike	Highest # of passengers				
			higher densities can better support FM/LM solutions; lower densities lack critical mass to make FM/LM solutions successful	high % employment indicates higher number of work trips and a higher percentage of routine trips that are often more easily captured by transit; low % employment indicates fewer peak period trips and more diverse trip-making patterns	low % auto ownership indicates more need for FM/LM solution; high % auto ownership indicates less need for FM/LM solution		higher densities can better support FM/LM solutions; lower densities lack critical mass to make FM/LM solutions successful	more large employers generate more trips to employment sites and more demand for FM/LA solutions; fewer large employers generate less demand to specific sites	more large employers generate more trips to employment sites and more demand for FM/LA solutions; fewer large employers generate less demand to specific sites		no motorized access indicates more need for FM/LM solution; both feeder bus and P&R access indicates less need for FM/LM solutions	station areas with fewer nearby intersections have less pedestrian access and are in most need of FM/LM solutions; station areas with more nearby intersections have better existing pedestrian access and less need for FM/LM solutions	station areas with fewer linear bike miles have less bike access and are in most need of FM/LM solutions; station areas with more linear bike miles have better existing bike access and less need for FM/LM solutions	Higher ridership indicates better existing access and less need for FM/LM solutions; fewer bus passengers indicates more need for FM/LM solutions				

(1) measures likelihood that the population would need and/or use a FM/LM solution

(2) measures potential for employee use of a FM/LM solution

(3) measures easy/difficulty of existing access to station

(4) % of Labor force employed (over 16 years old and looking for work. Excludes populations such as prison, convalescent home, etc.)

(5) The number of intersections (of 3 or more street segments) between non-limited access (surface) streets with in ½ mile of station. Separate calculations are provided with and without alleys. This calculation does not take into account the presence or condition of sidewalks. Intersection data is derived from the SanGIS Roads database, July 2010.

(6) Bike Route classifications:
Class I – Dedicated Path or Trail
Class II – Bike Lane
Class III – Posted Route
Class IV – Other Suggested Route
Bike route data is derived from the San Diego Region Bike Map (2009), produced by SANDAG

(7) Stations are shared with the San Diego Trolley Orange Line

Note: All population and job estimates reflect 2008 data. Auto ownership and employment rates are taken from the 2000 United States Census.

* addresses social equity

**I-15 BRT service to begin serving Kearny Mesa Transit Center in 2013

Summary Columns = Totals

=2 points

=1 point

=0 points

= potentially desired stations

Appendix B

List of Identified Stakeholder Groups and Contacts

B1 – Kearny Mesa Transit Center Area Stakeholders

CATEGORY	STAKEHOLDER	ADDRESS
Accessibility Challenged	Access to Independence	8885 Rio San Diego Drive, #131, San Diego, 92108
	Mayor's Committee on Disability	1200 Third Ave. Suite 1300 MS 56C, San Diego, 92101
	SANDAG Social Services Technical Advisory Committee	401 B Street, Suite 800, San Diego, 92101
Business groups	Industrial Environmental Association (trade association with many Kearny Mesa business members)	701 B Street, Suite 1040, San Diego, 92101
Car dealerships	BMW of San Diego	5090 Kearny Mesa Road, San Diego, 92111
	CarMax Kearny Mesa	7766 Balboa Avenue, San Diego, 92111
	Kearny Mesa Infiniti	4670 Convoy Street, San Diego, 92111
	Kearny Mesa Toyota	4910 Kearny Mesa Road, San Diego, 92111
	Mercedes Benz of San Diego	4750 Kearny Mesa Road, San Diego, 92111
	Pacific Honda	4761 Convoy Street, San Diego, 92111
	San Diego Volvo	5350 Kearny Mesa Road, San Diego, 92111
Community Planning Group	Kearny Mesa Planning Group	8906 Aero Drive, San Diego, 92123
Employers	Bridgepoint Education	8620 Spectrum Center Blvd., San Diego 92123
	Channel 51/KUSI	4575 Viewridge Avenue, San Diego, 92123
	City of San Diego Environmental Services Dept.	9601 Ridgehaven Court, San Diego, 92123
	County of San Diego (in their role as employer)	5201 Ruffin Road, San Diego, 92123
	Cox Communications	5651 Copley Drive, San Diego, 92111
	Cubic Corp.	9333 Balboa Avenue, San Diego, 92123
	Hamilton Sundstrand	4400 Ruffin Road, San Diego, 92123
	Jack in the Box	9330 Balboa Ave., San Diego, 92123
	Kaiser Permanente San Diego	4647 Zion Ave., San Diego, 92120
	Kaplan College	9055 Balboa Avenue, San Diego, 92123
	Kyocera San Diego	8611 Balboa Ave., San Diego, 92123
	L-3 Communications	9020 Balboa Ave, San Diego, 92123
	Leap Wireless/Cricket Communications	5887 Copley Drive, San Diego, 92111
	Northrup Grumman	9326 Spectrum Center Blvd., San Diego, 92123
	Raytheon Integrated Defense Systems	8680 Balboa Avenue, San Diego, 92123
	San Diego County Sheriff's Department (in their role as employer)	9621 Ridgehaven Court, San Diego, 92123
	SDG&E	8326 Century Park Court, San Diego, 92123
	Sharp Healthcare	8695 Spectrum Ctr Blvd, San Diego, 92123
	Solar Turbines	4200 Ruffin Road, San Diego, 92123
	Stu Segall Productions	4705 Ruffin Road, San Diego, 92123

B1 – Kearny Mesa Transit Center Area Stakeholders (continued)

CATEGORY	STAKEHOLDER	ADDRESS
Hotels	Courtyard San Diego Central	8651 Spectrum Center Blvd., San Diego, 92123
	Extended Stay America	3860 Murphy Canyon Road, San Diego, 92123
	Hampton Inn San Diego-Kearny Mesa	5434 Kearny Mesa Road, San Diego, 92123
	Holiday Inn San Diego-Mission Valley	3805 Murphy Canyon Road, San Diego, 92123
Non-profits	American Red Cross San Diego-Imperial Chapter	3950 Calle Fortunada, San Diego, 92123
	California Center for Sustainable Energy	8690 Balboa Avenue Suite 100, San Diego, 92123
	Toby Wells YMCA	5105 Overland Avenue, San Diego, 92123
Public facilities	Mike Tussey, City of SD Airports Div.	3750 John J. Montgomery Drive, San Diego, 92123
Residential communities	Avion Apartments (Spectrum Center)	8811 Spectrum Center Blvd., San Diego, 92123
	Boardwalk Condos HOA (Spectrum Center)	8995 Spectrum Center Blvd., San Diego, 92123
	Esplanade Condos HOA (Spectrum Center)	8842 Spectrum Center Blvd., San Diego, 92123
	Kearny Mesa Lodge Mobile Home Park	6460 Convoy Court, San Diego, 92117
	Promenade Condos HOA (Spectrum Center)	Spectrum Center, San Diego, 92123
	Tribeca Condos HOA (Spectrum Center)	Spectrum Center, 92123
Schools	Coleman College	8888 Balboa Avenue, San Diego, 92123
	National University Law School	9388 Lightwave Avenue, San Diego, 92123
	University of Phoenix	3890 Murphy Canyon Road, San Diego, 92123
Shopping Centers	Target Shopping Center (Convoy)	8001 Othello Ave, San Diego, 92111
	Vista Balboa Center (Albertson's)	7725 Balboa Avenue, San Diego, 92111
Transportation & Bicycle Advocates	Move San Diego	P.O. Box 87588, San Diego, 92138
	San Diego County Bicycle Coalition	P.O. Box 34544, San Diego, 92163
	Walk San Diego	740 13th Street, Suite 502, San Diego, 92101

B2 – 32nd & Commercial Station Area Stakeholders

CATEGORY	STAKEHOLDER	ADDRESS
Accessibility Challenged	Access to Independence	8885 Rio San Diego Drive, #131, San Diego, 92108
	Mayor's Committee on Disability	1200 Third Ave. Suite 1300 MS 56C, San Diego, 92101
	SANDAG Social Services Technical Advisory Committee	401 B Street, Suite 800, San Diego, 92101
Agencies	SD Police Department	2501 Imperial Avenue, SD 92101
	SEDC	404 Euclid Ave., 221, San Diego, 92114
Churches/Places of Worship (numerous churches in area - recommend that you speak with council office for more direction)		
Community Leaders	Southeastern San Diego Planning Group	5648 Toyon Road, San Diego, 92115
	Stockton Council	3040 32nd Street, San Diego, 92104
Employers	Costco	650 Gateway Center Drive, San Diego, 92102-4594
Non-profits	Family Health Centers of San Diego	823 Gateway Center Way, San Diego, 92102
	Father Joe's Villages	3350 E Street, San Diego, 92102
	Jackie Robinson YMCA (just to the east of boundary)	151 YMCA Way, San Diego, 92102
	San Diego Urban League	720 Gateway Center Drive, San Diego, 92102
	The Arc of San Diego	3030 Market Street, San Diego, 92102
	The IRC San Diego	5348 University Avenue, #205, San Diego, CA 92105
Schools	Baker Elementary School	4041 T Street, San Diego, 92113
	Career College of San Diego	3350 Market Street, San Diego, 92102
	Center for Employment Training	3295 Market Street, San Diego, 92102
	Concord Career College	4393 Imperial Avenue, San Diego, 92113
	King-Chavez Preschool and Primary	415 31st Street, San Diego, CA 92102
	King-Chavez Preperatory Academy	500 30th Street, San Diego, 92102
	Logan Elementary School	2875 Ocean View Blvd., San Diego, 92113
	Rodriguez Elementary School	825 South 31st Street, San Diego, 92113
Transportation & Bicycle Advocates	Move San Diego	P.O. Box 87588, San Diego, 92138
	San Diego Bicycle Coalition	P.O. Box 34544, San Diego, 92163
	Walk San Diego	740 13th Street, Suite 502, San Diego, 92101

Appendix C

Survey Questionnaires

C1: Kearny Mesa Station Intercept Survey Questionnaire

SP

KEARNY MESA STATION SURVEY

The San Diego Association of Governments needs your help. We would like to learn more about how you get to/from this station and how we can improve the facilities here. The information will help us create a more enjoyable experience for people using this station. **All responses are confidential.** Thank you!

1. **On average, how many DAYS a WEEK do you visit this station to ride the bus?**

   _____ **days a week**

   ☐ This is my first time at this station

2. **Where are you GOING TO after leaving this station today? (check one)**

   ☐ My Home
   ☐ Work
   ☐ Business meeting
   ☐ School/College Classes
   ☐ Shopping
   ☐ Food/Drink/Entertainment
   ☐ Medical Services
   ☐ Other _____

3. **What is the address or nearest intersection where that place is located?**

   _____ _____
   Address or nearest intersection — ZIP Code

4. **Approximately how far is that place from this station?**

   ☐ Less than a ¼ mile
   ☐ ¼ mile to ½ mile
   ☐ ½ mile to 1 mile
   ☐ More than 1 mile

5. **How will you get from this station to that place today?**

   ☐ Get picked up by someone
   ☐ Shuttle
   ☐ Transfer to another bus
   ☐ Ride my bicycle
   ☐ Walk
   ☐ Other _____

6. **What could be improved to make it easier for you to get to that place from this station? (Please check all that apply.)**

   ☐ Provide a shuttle
   ☐ Fix sidewalks
   ☐ More sidewalks
   ☐ Bike lanes
   ☐ Bike share program that lets me rent a bike at station and return to station later
   ☐ Car share program that lets me rent a car at station and return to station later
   ☐ Employer carpool program from station to work
   ☐ Better lighting along my route
   ☐ Dedicated pick-up/drop off location
   ☐ Other _____

7. **How well do you feel this station meets your needs in the following areas? (Rate from 1 to 5 with 1 being very poor and 5 very good)**

		Very Poor				Very Well	
a	Parking	1	2	3	4	5	n/a
b	Security	1	2	3	4	5	n/a
c	Convenient location	1	2	3	4	5	n/a
d	Easy access by vehicle	1	2	3	4	5	n/a
e	Easy access by bike	1	2	3	4	5	n/a
f	Easy access by walking	1	2	3	4	5	n/a
g	Bike racks or lockers	1	2	3	4	5	n/a
h	Lighting	1	2	3	4	5	n/a
i	Providing schedule info	1	2	3	4	5	n/a
j	Easy to pay fare	1	2	3	4	5	n/a

8. **If you circled a 1 or a 2 in Question 7, what could be improved to better meet your needs at this station?**

   _____
   _____
   _____
   _____

9. **How safe or unsafe do you feel while waiting at this station?**

   ☐ Safe ☐ Somewhat safe ☐ Somewhat unsafe ☐ Unsafe

10. **If you feel unsafe or somewhat unsafe, what could be done to make you feel safer at this station?**

    _____
    _____
    _____

DO YOU WANT TO TELL US MORE ABOUT YOUR EXPERIENCE GETTING TO/FROM THIS STATION AND WHAT WE CAN DO TO IMPROVE IT?

If you would be willing to participate in a focus group to help us learn more about how people get to and from this station and how we can improve it, please provide your name and phone below. Thank you!

NAME_____

PHONE NUMBER_____

C1: 32nd & Commercial Station Intercept Survey Questionnaire

SANDAG

32nd and Commercial Station Survey

SP

The San Diego Association of Governments needs your help. We would like to learn more about how you get to/from this station and how we can improve the facilities here. The information will help us create a more enjoyable experience for people using this station. **All responses are confidential.** Thank you!

1. **On average, how many DAYS a WEEK do you visit this station to ride transit?**

   _____ **days a week**

   ☐ This is my first time at this station

2. **Where did you COME FROM before arriving at this station today? (check one)**

   ☐ My Home ☐ Shopping
   ☐ Work ☐ Food/Drink/Entertainment
   ☐ Business meeting ☐ Medical Services
   ☐ School/College Classes ☐ Other _____

3. **What neighborhood is that place located?**

   _____
   Neighborhood name or nearest major intersection

4. **Approximately how far is that place from this station?**

   ☐ Less than a ¼ mile
   ☐ ¼ mile to ½ mile
   ☐ ½ mile to 1 mile
   ☐ More than 1 mile

5. **How did you get from that place to this station today?**

   ☐ Drove in my car alone and parked
   ☐ Carpooled
   ☐ Got dropped-off by someone
   ☐ Shuttle
   ☐ Transferred from another bus or trolley
   ☐ Rode my bicycle
   ☐ Walked
   ☐ Other _____

6. **Where are you GOING TO after leaving this station today? (check one)**

   ☐ My Home ☐ Shopping
   ☐ Work ☐ Food/Drink/Entertainment
   ☐ Business meeting ☐ Medical Services
   ☐ School/College Classes ☐ Other _____

PLEASE TELL US ABOUT YOUR EXPERIENCE GETTING TO THE STATION TODAY:

7. **On a scale of 1 to 5, with 1 being very difficult and 5 being very easy, how easy or difficult was it to find:**

		Very Difficult				Very Easy	
a	The station location	1	2	3	4	5	
b	Transportation to this station	1	2	3	4	5	
c	A safe route to this station	1	2	3	4	5	
d	Signs with station location	1	2	3	4	5	
e	Disability access to station	1	2	3	4	5	n/a
f	Bike lanes to station	1	2	3	4	5	n/a
g	Fare information	1	2	3	4	5	n/a
h	Information about using transit	1	2	3	4	5	n/a

8. **If you circled a 1 or a 2 in Question 7, what could be improved to make it easier for you to get to this station?**

   _____
   _
   _____
   _

PLEASE TELL US ABOUT YOUR EXPERIENCE AT THIS STATION:

9. **How well do you feel this station meets your needs in the following areas? (Rate from 1 to 5 with 1 being very poor and 5 very good)**

		Very Poor				Very Well	
a	Parking	1	2	3	4	5	n/a
b	Security	1	2	3	4	5	n/a
c	Convenient location	1	2	3	4	5	n/a
d	Easy access by vehicle	1	2	3	4	5	n/a
e	Easy access by bike	1	2	3	4	5	n/a
f	Easy access by walking	1	2	3	4	5	n/a
g	Bike racks or lockers	1	2	3	4	5	n/a
h	Lighting	1	2	3	4	5	n/a
i	Providing schedule info	1	2	3	4	5	n/a
j	Easy to pay fare	1	2	3	4	5	n/a

10. **If you circled a 1 or a 2 in Question 9, what could be improved to better meet your needs at this station?**

    _____
    _
    _____
    _

11. **How safe or unsafe do you feel while waiting at this station?**

    ☐ Safe ☐ Somewhat safe ☐ Somewhat unsafe ☐ Unsafe

12. **If you feel unsafe or somewhat unsafe, what could be done to make you feel safer at this station?**

    _____
    _____
    _

DO YOU WANT TO TELL US MORE ABOUT YOUR EXPERIENCE GETTING TO THIS STATION AND WHAT WE CAN DO TO IMPROVE IT?

If you would be willing to participate in a focus group to help us learn more about how people get to this station and how we can improve it, please provide your name and phone below. Thank you!

C2. Kearny Mesa Station Web-based Survey Questionnaire

1st/Last Mile_Employees

INTRODUCTION

The San Diego Association of Governments (SANDAG) needs your help.

We want to improve the transit station near your work. The results of this survey will help us provide a better experience for current transit riders.

All responses will be anonymous and individual answers will be confidential.

1st/Last Mile_Employees

What is the name of the business where you work?

What is the address or nearest interesection to your work location?

How many days did you take transit (bus, trolley, train) to your current job in the last 30 days?

- ◯ None
- ◯ 1 to 2 days
- ◯ 3 to 4 days
- ◯ 5 to 10 days
- ◯ More than 10 days

1st/Last Mile_Employees

Ever Ridden Transit to Work

Have you ever taken transit (bus, trolley, or train) to get to your current job?

- ◯ Yes
- ◯ No

What is the primary reason you currently don't ride transit to get to work?

1st/Last Mile_Employees

Station

What was the LAST station you got off during your most recent transit trip to work?

- ◯ 32nd & Commercial
- ◯ Kearny Mesa
- ◯ Other (please specify)

How do you typically get from the last station to your work location?

- ◯ Get picked up by someone
- ◯ Shuttle
- ◯ Ride my bicycle
- ◯ Walk
- ◯ Other (please specify)

What could be improved to make it easier for you to get from the last station to your work location? (Please select all that apply.)

- ☐ Provide a shuttle
- ☐ Fix sidewalks
- ☐ More sidewalks
- ☐ Bike lanes
- ☐ Bike share program that lets me rent a bike at the station and return it near work
- ☐ Carshare program that lets me access a car at the station and return it near my work
- ☐ Employer carpool program from station to work
- ☐ Better lighting along route to work
- ☐ Dedicated pick-up/drop off location
- ☐ Other (please specify)

1st/Last Mile_Employees

Interest

How interested are you in riding transit more often than you do now?

- ◯ Very interested
- ◯ Interested
- ◯ Somewhat interested
- ◯ Not at all interested
- ◯ I already ride everyday

1st/Last Mile_Employees

How likely would you be to ride transit more often than you do now if there were:

	Very likely	Likely	Somewhat likely	Not at all likely
Shuttle between the station and your work	◯	◯	◯	◯
More sidewalks between the station and your work	◯	◯	◯	◯
Bike lanes between the station and your work	◯	◯	◯	◯
A bike share program that lets you rent a bike at the station and return it near work	◯	◯	◯	◯
A carshare program that lets me access a car at the station and return it near my work	◯	◯	◯	◯
Employer carpool program from station to work	◯	◯	◯	◯
Better lighting along route to work	◯	◯	◯	◯
Dedicated pick-up/drop off location	◯	◯	◯	◯

Are there any other improvements we could make to encourage you to ride transit more often from this station? If so, please describe below:

1st/Last Mile_Employees

We want to know more about your commute!

We want to know more about your commute! If you would be willing to participate in a focus group to help us learn more about improving this station, please provide your name and phone number below. This information will be kept private and only used to contact you regarding a focus group.

Contact information:

Name

Phone number

1st/Last Mile_Employees

Thank You!

Thank you for participating in our survey. Your input is greatly appreciated!

C2. 32nd & Commercial Station Web-Based Survey Questionnaire

1st/Last Mile_Residents

INTRODUCTION

The San Diego Association of Governments (SANDAG) needs your help.

We want to improve the transit station in your neighborhood. The results of this survey will help us provide a better experience for current transit riders.

All responses will be anonymous and individual answers will be confidential.

1st/Last Mile_Residents

Which station is closer to your home?

- ◯ 32nd & Commercial Street
- ◯ Kearny Mesa

1st/Last Mile_Residents

This rest of this survey will ask questions about transit station. Please base the rest of your survey answers on the station you selected in Question 1.

Approximately, how far do you live from that station?

- ◯ Less than 1/4 mile
- ◯ 1/4 mile to 1/2 mile
- ◯ 1/2 mile to 1 mile
- ◯ More than 1 mile

How many days did you take the bus or the trolley from that station in the last 30 days?

- ◯ None
- ◯ 1 to 2 days
- ◯ 3 to 4 days
- ◯ 5 to 10 days
- ◯ More than 10 times

1st/Last Mile_Residents

Transit riders

How well do you feel the station meets your needs in the following areas:

	Very poor	Poor	Neutral	Well	Very well	n/a
Parking	◯	◯	◯	◯	◯	◯
Security	◯	◯	◯	◯	◯	◯
Convenient location	◯	◯	◯	◯	◯	◯
Easy access by vehicle	◯	◯	◯	◯	◯	◯
Easy access by bike	◯	◯	◯	◯	◯	◯
Easy access by walking	◯	◯	◯	◯	◯	◯
Bike racks or lockers	◯	◯	◯	◯	◯	◯
Lighting	◯	◯	◯	◯	◯	◯
Providing schedule information	◯	◯	◯	◯	◯	◯
Easy to pay fare at station	◯	◯	◯	◯	◯	◯

1st/Last Mile_Residents

How interested are you in riding transit more often than you do now?

- ◯ Very interested
- ◯ Interested
- ◯ Somewhat interested
- ◯ Not at all interested
- ◯ I already ride everyday

1st/Last Mile_Residents

How likely would you be to ride transit more often than you do now if there were:

	Very likely	Likely	Somewhat likely	Not at all likely
Transportation provided between your home and the station	◯	◯	◯	◯
Bike racks or lockers at the station	◯	◯	◯	◯
Well lit sidewalks to station	◯	◯	◯	◯
Bike lanes to the station	◯	◯	◯	◯
Disability access to the station	◯	◯	◯	◯
Parking at the station	◯	◯	◯	◯
Dedicated pick-up/drop off location at station	◯	◯	◯	◯

Are there any other improvements we could make to encourage you to ride transit more often from this station? If so, please describe below:

1st/Last Mile_Residents

We want to know more about your commute!

We want to know more about your commute! If you would be willing to participate in a focus group to help us learn more about how we could improve access to this station, please provide your name and phone number below. This information will be kept private and only used to contact you regarding a focus group.

Contact information:

Name

Phone number

1st/Last Mile_Residents

Thank You!

Thank you for participating in our survey. Your input is greatly appreciated!

SANDAG

PARSONS BRINCKERHOFF

WilburSmith ASSOCIATES ENGINEERS PLANNERS ECONOMISTS